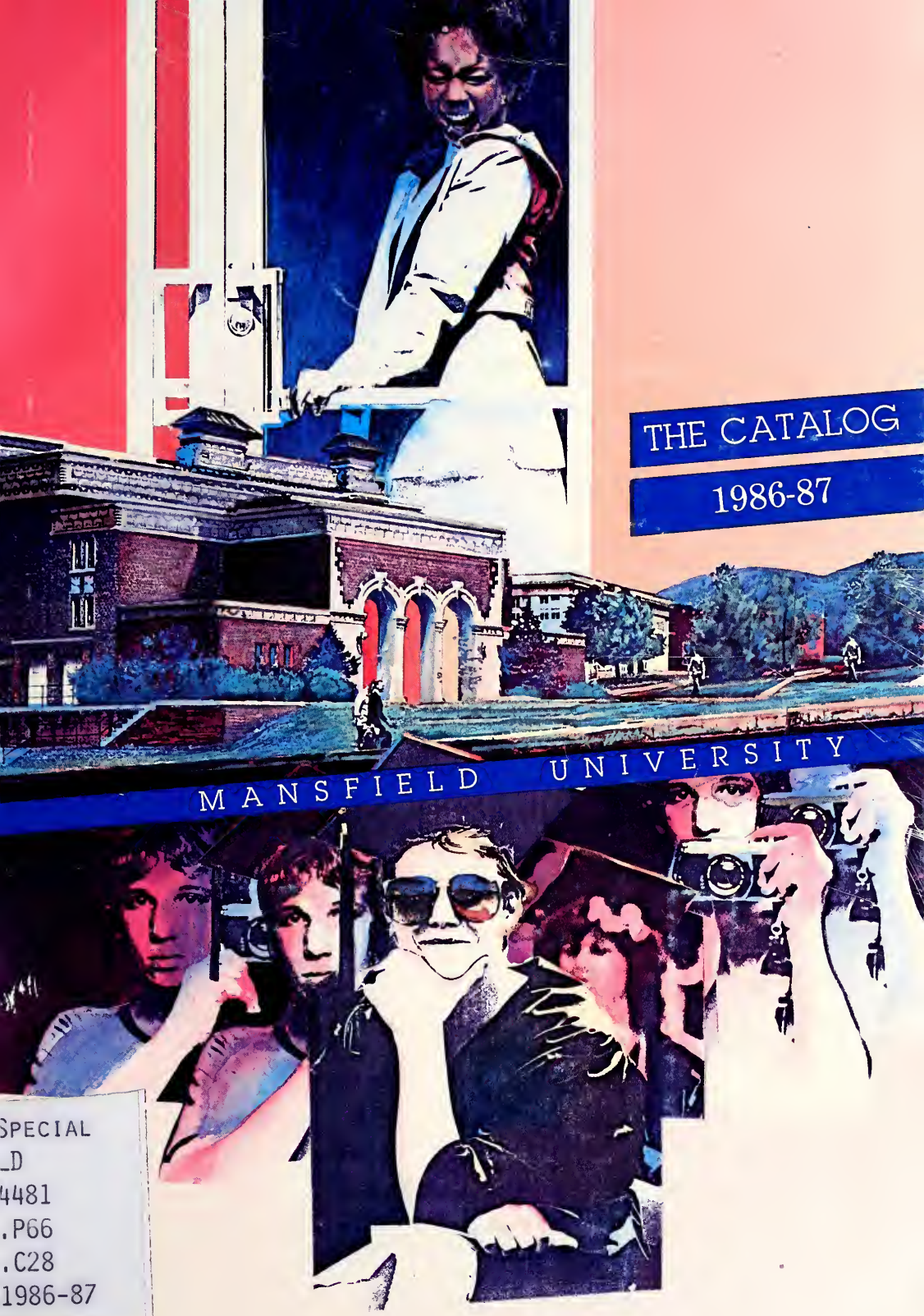

THE CATALOG

1986-87

MANSFIELD UNIVERSITY

SPECIAL
LD
4481
.P66
.C28
1986-87

	DATE DUE		

Special
LD
4481 Mansfield University
.P66
.C28 Undergraduate catalog
1986-87

MANSFIELD UNIVERSITY LIBRARY
Mansfield PA 16933-1198

MANSFIELD UNIVERSITY LIBRARY
3 3098 00258 8601

THE UNDERGRADUATE CATALOG 1986-87

MANSFIELD UNIVERSITY

A Unit of the Pennsylvania State System of Higher Education

MANSFIELD, PENNSYLVANIA 16933

Any information contained herein is subject to change without notice.

DIRECTIONS FOR CORRESPONDENCE

Academic Information	Dr. George H. Mullen, Provost/ Vice President for Academic Affairs 662-4450
Admissions	Mr. John Abplanalp, Director 662-4205
Continuing Education, Summer School	Mrs. Celeste Sexauer 662-4244
Financial Aid	Dr. Enrico Serine, Director 662-4129
Public Relations and Publications	Mr. Dennis R. Miller, Director 662-4239
Records and Transcripts	Mr. John Monoski, Registrar 662-4202
Residence Life	Mr. Michael Lemasters, Director 662-4403
Revenue, Financial Affairs	Office of the Vice President for Administration and Finance 662-4494
Student Affairs	Mr. Joseph Maresco, Vice President for Student Affairs 662-4403

Special
LD
4481
.P66
.C28
1986-87

ACCREDITATION

The principal accrediting agencies for Mansfield University are the Middle States Association of Colleges and Secondary Schools and the National Council for Accreditation of Teacher Education. Additional accreditation is by the National Association of Schools of Music, the Council on Social Work Education, the National Association for Music Therapy, and the Committee for Allied Health Education Accreditation of the American Medical Association.

HISTORY

Mansfield University dates to 1857 when the Mansfield Classical Seminary opened with 105 students. In 1862 the institution was designated a State Normal School for the training of teachers. Enrollment had grown to 400 by 1905. In 1927 Mansfield became the first school in Pennsylvania to be designated a State Teachers College, authorized by the State Board of Education to grant Bachelor of Science degrees in elementary and secondary education, music, and home economics. In 1960, it became Mansfield State College, a multi-purpose institution offering a broad range of curricula. Finally, on July 1, 1983, Mansfield University came into being, a unit of the State System of Higher Education. A fully accredited four year, co-educational institution, Mansfield University consists of the College of Arts and Sciences and the School of Professional Studies. Today, more than **76 undergraduate programs** and **9 master's** degree programs are offered to about 2800 students.

MANSFIELD UNIVERSITY FACT SHEET

Founded: 1857; a unit of the Pennsylvania State System of Higher Education.

Calendar: The academic calendar consists of a fall term which ends before Christmas and a spring term ending mid-May. Two optional summer terms are also provided.

Curriculum: Four-year baccalaureate programs in the liberal arts and professional studies, 2-year associate programs in liberal arts, fish culture, respiratory therapy, and X-ray technology and master's degree programs.

Degrees Granted: A.A., A.S., B.A., B.M., B.M.M.E., B.S., B.S.E., B.S.W., M.A., M.S., M.Ed., Teacher Certification

Programs of study: associate degrees in 9 fields, bachelor's degrees in 63 fields, master's degree in 11 fields, plus 29 minors offered.

Special options: double majors, self-developed major, honors program, internships, departmental honors, independent study.

Number of faculty: 168 teaching faculty (27% full professors); academic support faculty - 28.

Student - faculty ratio: 16:1 Average class size: about 80% of classes have fewer than 30 students; 58% fewer than 20 students; only 4% have 50 or more students. Overall average is 18 students per class.

Location: Mansfield, a borough of 4,000 persons, is located in the Northern Tier of Pennsylvania at the intersection of U.S. 15 and U.S. 6. It is 50 miles north of Williamsport, PA and 35 miles south of Corning, NY. Driving times to: Harrisburg, PA, 3 hours, Scranton, PA, 2 hours, Buffalo, NY, 3 hours, Binghamton, NY, 1 hour, Philadelphia, PA, 4 hours, Pittsburgh, PA 5 hours, New York City, 5 hours. Daily bus service north and south connects all points in the northeast U.S. Campus: 174 acres, 32 buildings, recreation areas, tennis courts, playing fields, indoor swimming pool, 3 auditoriums, planetarium.

Library facilities: 195,000 book volumes; 531,000 micro-volumes; 2,233 current periodicals; 14,967 media items; 23,000 reels of microfilm; 8,000+ music recordings. The Library is converting its card catalog to a machine readable file using CD-ROM technology. MU is the first University to employ this technology in the U.S.

Computer facilities: IBM mainframe, VM/CMS operating system, Basic, COBOL, FORTRAN, MINITAB, PASCAL, PL/1, SPSS, SQL, WATFIV, IBM PC's: BASIC, COBOL, FORTRAN, word processing, spread sheets.

Residence Halls: 5 residence halls house about 1670 students. Housing options include male, female, and co-ed. We attempt to house freshmen together for special programming needs.

Student enrollment: 2868 enrolled, 2266 attend full time. 1561 females, 1307 males. Students come from 15 states and 22 foreign countries.

Student Financial Aid: over 85% of students receive financial assistance in some form. About 40 scholarships are awarded annually.

College Financial Data: Physical plant value $35,200,000; endowment of $600,000+ operating budget for 1985-86, $21,000,000.

Region - Year round outdoor activities are available in the immediate region. Opportunities include hunting, fishing, skiing, camping, hiking, water sports. Cultural attractions include the Clemens Center of Performing Arts in Elmira, N.Y., Corning Glass Museum, Rockwell Museum of Western Art, and Lumbermen's Museum in Galeton, PA

Digitized by the Internet Archive
in 2011 with funding from
LYRASIS Members and Sloan Foundation

http://www.archive.org/details/undergraduatecat8687mans

TABLE OF CONTENTS

ADMISSIONS	5
FEES AND CHARGES	10
FINANCIAL AID	14
STUDENT LIFE AND SERVICES	17
ACADEMIC POLICIES	21
THE PROGRAMS	37
COURSE DESCRIPTIONS	121
SCHOLARSHIP PROGRAM	190
PERSONNEL	193
ADMINISTRATIVE OFFICERS AND STAFF	194
ACADEMIC FACULTY AND UNIVERSITY ADMINISTRATION	195
ACADEMIC CALENDAR	209
INDEX	210

ADMISSIONS

REQUIREMENTS FOR ADMISSION

1. General scholarship as demonstrated by:
   a. graduation from an approved secondary school or equivalent preparation as determined by the Credentials Evaluation Division of the Pennsylvania Department of Education.
   b. a satisfactory score in the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board or the American College Testing (ACT).
2. Class rank in the upper three-fifths of the graduating class. Completion of the following secondary school work (grades 10-12) is recommended as minimum preparation:

English		3 credits
History or Social Studies		2 credits
Laboratory Science		2 credits
Algebra and/or Plane Geometry		2 credits
Foreign Language		2 credits
Electives		5 credits
	Total	16 credits

When a student has been granted admission and fails to enroll, his acceptance for admission will be valid for no more than one year following the entry date originally applied for. After one year such students must reapply for admission as new applicants and meet the standards for acceptance current at the time of reapplication.

The university reserves the right to establish or change admission standards as it deems necessary. All entering students must take diagnostic placement examinations in writing skills, mathematical skills, & reading/study skills.

All applications for admission should be made to the Director of Admissions, Mansfield University, Mansfield, PA 16933.

ADMISSIONS CATEGORIES

1. **Regular Acceptance**
   Regular acceptance standards consistent with current "regular accept" criterion, as stated above -Fall entry.
2. **Acceptance into the Summer Development Program**
   This category of acceptance is designed for students who demonstrate a potential for success in college but who:
   a. may not have completed the recommended high school course sequence
   b. may have high school cumulative grade point average or class rank below those normally required for regular admission
   c. may have a fundamental weakness in the critical areas of writing skills, mathematical skills, reading/study skills which must be addressed to enhance later success
   d. may have combinations of the above and low test scores on SAT/ACT which prohibit regular acceptance. Students selected for this program attend a six-week Summer Developmental Program pursuing course work which is based on diagnostic-placement results. Upon successful completion of the Summer Developmental Program, the participant continues as a matriculated student in the fall term.

The Summer Developmental Program is a component of the Equal Education Opportunity Program. Further details may be obtained by contacting the Director of Admissions (717)662-4243 and/or Director of Equal Education Opportunity Program (717)662-4436.

APPLICATION PROCEDURES (Freshmen)

1. Return the application form with a fifteen dollar ($15.00), non-refundable application fee.* Applications will be accepted beginning July 1 following the junior year of high school.

*Note: Fees subject to change without notice.

2. Submit an official high school transcript. The student's high school counselor can send a xerox copy of the official transcript. An official copy must bear the seal of the school and signature of an official.
3. S.A.T. scores, including T.S.W.E. score, or A.C.T. scores should be forwarded to the Admissions Office.

STUDENTS WHO MISREPRESENT, ALTER OR OMIT ACADEMIC CREDENTIALS PRIOR TO ENROLLMENT AT MANSFIELD UNIVERSITY WILL HAVE THEIR ACCEPTANCE REVOKED. IF THE MISREPRESENTATION, ALTERATION OR OMISSION IS DISCOVERED OR OCCURS AFTER ENROLLMENT, THE STUDENT WILL BE CHARGED WITH VIOLATION OF THE UNIVERSITY POLICY AND WILL BE SUBJECT TO JUDICIAL PROCEDURE.

EARLY DECISION

Consideration for an early decision for fall entrance will be given to those candidates who meet prescribed requirements in terms of secondary school achievement and junior year S.A.T. scores. Those offered admission through early decision will be required to submit scores from a senior year examination of the S.A.T. Applicants who qualify for early decision will be notified upon receipt of the completed application, application fee, official high school transcript, and junior year SAT/ACT scores.

EARLY STUDIES PROGRAM

Under this program, students who are juniors and seniors in high school with the appropriate grade point average can attend college and earn college credit. Students who are interested should see their high school counselor for an application or call the Admissions Office (662-4243) at the university. Early Studies is available during fall and spring semesters, as well as summer sessions.

Option A. High school seniors who meet the admission requirement and are interested in attending Mansfield University in lieu of attendance during their senior year are eligible to attend full time or students who meet the admission requirements and have only 2 high school courses to complete, are eligible to enroll for a maximum of 9 credits during the regular semester and 6 credits in summer.

Option B. High school seniors with a minimum of a 2.75 grade average are eligible to enroll as a special student for a maximum of 6 credits during the regular semester and 6 credits total in the summer session.

Option C. High school juniors with a minimum grade point average of 3.5 are eligible to enroll as a special student for a maximum of 3 credits during the regular semester and 3 credits during the summer session. The credit restrictions under each option apply in all but unusual circumstances.

SPECIAL ART/MUSIC PROGRAM REQUIREMENTS:

Applicants for an art degree must present a portfolio of their work to the Art Department for evaluation after satisfying general college admissions requirements and prior to formal acceptance into the Art Department.

All applicants for a music degree, once they have satisfied the requirements for general college admission, must have an audition for acceptance into the music department. Acceptance is based upon a demonstration of both musical aptitude and musical accomplishment. For further information contact the music department (717)662-4080.

APPLICATION PROCEDURES (Transfers)

1. The applicant should send official transcript(s) from any college(s) previously attended. Transcripts and admission data should be sent to the Director of Admissions before April 1 for the fall semester or before October 1 for the spring semester.

2. Transfer applicants for the fall semester are notified on a rolling basis prior to the desired enrollment date. An evaluation of credits accepted in transfer will be made upon acceptance.
3. If an applicant is approved for transfer to Mansfield University and he/she is enrolled as a student at another institution, it will be understood that such admission has been granted on a provisional basis until all records from the previous institution have been reviewed and finalized.

POLICY ON ADMISSION OF TRANSFER STUDENTS

Students are normally eligible to transfer if they have attained an overall 2.0 cumulative average at an accredited post-secondary institution.

Credit will be given for acceptable courses completed in accredited colleges. Mansfield University accepts undergraduate credit transferred from approved non-accepted colleges. This credit is subject to validation by one year's successful work after transfer and may then be counted toward undergraduate degree requirements at Mansfield University.

No student may be granted and receive a degree from this university without a minimum residence of one year. A minimum of thirty-two semester hours of work earned on campus will meet the requirements for one year residence. Degree candidates who wish to pursue any part of the program of studies for a degree at another institution will be required to secure prior approval from the Office of the Provost/Vice President for Academic Affairs.

TRANSFER CREDIT

Following acceptance into the university, an evaluation of courses taken at the previous institution is made by the registrar's office in consultation with the chairperson of the student's major department.

Students entering Mansfield University will have their credits evaluated on a course by course basis. General Education requirements will not be automatically met.

Any exceptions to this policy are specified in articulation agreements of transfer between Mansfield and two-year institutions. Presently, agreements exist with Harrisburg Area Community College, Luzerne Community College, Williamsport Area Community College and Keystone Junior College.

TRANSFER EVALUATION - Grades

A. No grades or quality point average transfer from the previous institution. Credits transfer but not grades.
B. Only those courses for which a "C" grade or better has been earned will be considered for transfer credit to Mansfield University unless the student has earned an associate or bachelor's degree from an accredited college, community college, or junior college. Consistent with this policy, credit will only be provided for those courses with transcript notations such as "Pass", "Credit by Examination", "Satisfactory", when a grade of "C"or better has been required for the award of credit.

TRANSFER EVALUATION - Semester Hours

A. The following is intended as a brief explanation of the most common systems-quarter and unit- which are utilized at other institutions. There are others. The system employed by a college will usually be indicated on the student's transcript. Questions should be addressed to the Registrar's Office.
   1. Quarter

      Courses transferred from institutions utilizing quarter hours must be converted to semester hours to obtain the number of transfer hours. Quarter hours are multiplied times 2/3; thus a three-quarter hour course is equivalent to two semester hours, four-quarter hours equal 2 2/3, five-quarter hours equal 3 1/3, etc. While fractions for different courses are not added together to give more credit in, for example, Group III, the total number of quarter hours accepted in transfer is multiplied times 2/3, and the result is the total number of semester hours accepted in transfer. Any excess fraction in the total number of transfer credits is discounted.

2. Unit
   In a unit system, one unit is usually equal to 3.5 semester hours. Thus, the number of units is multiplied times 3.5. A one unit mathematics course would be equivalent to 3 semester hours. The treatment of fractional ours is the same as stated for the quarter-hour system in the preceding paragraph.

B. The number of credit hours that transfer from another institution is the number which is given for completion of the courses by the previous institution. For example, some institutions do not give credit for physical education courses. A student transferring to Mansfield University from such an institution would have met the physical education requirement at Mansfield University for as many physical education courses as taken previously, but no credit would be given at Mansfield University. Similarly, an introductory biology course might carry three (3) credits at another institution. The transfer student would bring in three credits for such course even though Biology at Mansfield University is a four (4) credit course. Furthermore, if a U.S. history course is four credits at the previous institution, the transfer student receives four credits even though U.S. History at Mansfield University is a three credit course.

C. Transfer students with an associate degree or a bachelor's degree will not be required to take diagnostic placement tests. Transfer students without a degree will not be required to take a diagnostic placement test in any area for which they have a comparable course transfer grade of "C" or better.

D. Because of the time sequence necessary for the development of skills required by the music curriculum, students transferring into music are advised to transfer as early as possible. Otherwise, it becomes increasingly difficult to complete the curriculum within the normal four-year span of time. Transfer credits in the music area must be validated by examination before they may be accepted for transfer. This is to insure that the student is capable of successfully completing the remaining courses which will be required of him/her.

MAXIMUM HOURS ACCEPTED IN TRANSFER

Mansfield University will not accept in transfer more than 67 semester hours of course work from two-year junior or community colleges. Once Mansfield University has accepted a student with an associate degree for transfer, that student may not transfer additional semester hours of course work from two-year junior or community colleges.

NON-ACCREDITED COLLEGES

Credits transferred from non-accredited colleges or universities are received on a probationary basis. The student must achieve a 2.00 QPA after the first two semesters of matriculation as a full-time student (minimum of 24 semester hours) in order to validate the award of transfer credits.

READMISSION OF FORMER STUDENTS

All students who have not been in regular attendance during the previous semester must apply for readmission to the university.

Exception to this policy include special students, inservice teachers not seeking a degree or program certification, and students in continuing education.

An applicant for readmission should request an application form from the Office of Admissions and return it with the admission fee by May 1 for the fall semester or by November 15 for the spring semester. This fee is waived for students who followed the proper withdrawal process outlined in the section "Withdrawal from the University". A statement about the activities, including such information as employment, college course work completed, military service, etc., should accompany the application.

Students readmitted following a break of more than one semester fall under all university policies in effect at the time of readmission. (See section on Maintenance of Matriculation.)

Before students are readmitted, they must clear all outstanding university related debts.

CERTIFICATION

Applicants desiring endorsement for teacher certification by Mansfield University (e.g. B.A. in Biology degree holder seeking certification in Secondary - biology; B.S. Secondary Education holder seeking added certification in Elementary Education) must complete or submit the following:

1. Personal interview with the Coordinator for Teacher Education.
2. Application form may be obtained from the Office of the Coordinator for Teacher Education. The application should be completed and returned with a fifteen dollar ($15.00) application fee.*
3. Official transcripts of all college work completed.

Any student having a certification related problem should follow this procedure:

A. The student should first present the problem, orally and informally to his/her departmental chairperson.

B. If no agreement is reached, the student may prepare a written statement which contains supporting evidence and indicates the desired solution. This written statement must be submitted to the departmental chairperson and the coordinator for Teacher Education. The student, the chairperson, and the Coordinator for Teacher Education shall meet together to discuss the problem.

C. If the problem is still unresolved, the student may request a hearing before the Teacher Education Council. This hearing must be requested within ten days of the meeting in Step B. The student is responsible for giving the Coordinator for Teacher Education eight copies of the statement for distribution to the members of the Teacher Education Council.

D. If the problem is not resolved in Step C, the student may request a hearing with the departmental chairperson, the Coordinator for Teacher Education and the Provost/Vice President for Academic Affairs. This Committee will be the final appeal group and take whatever action is deemed necessary.

*Note: Fees subject to change without notice.

CONTINUING EDUCATION

Mansfield University credit courses and programs offered to adult students through the Division of Continuing Education are those approved courses, programs, and experimental courses developed by faculty members to provide educational opportunities for non-matriculating adults, on or off-campus during the day or evening, from the region served by Mansfield University.

SUMMER SCHOOL

Summer school sessions offer a wide range of educational opportunities that include credit courses for graduates and undergraduates, non-credit enrichment courses, camps, conferences and specialized workshops.

GRADUATE STUDIES

The university offers graduate programs leading to the master of arts degree in community psychology and music. The master of education degree is offered in art, music, elementary education, and special education. The master of science degree is offered in education, special education-exceptional persons, home economics, and music. State certification programs are available in reading, social restoration, and supervisory I specialists. Most graduate courses are offered in the evenings and summer sessions at times convenient for professionals. For further information concerning graduate programs contact the Graduate Office or refer to the current graduate bulletin.

FEES AND CHARGES

(Fees are subject to change without notice)

ADMISSION FEES

Application Fee	$15.00
Advance Deposit - 1st semester (Credit on account)	$80.00

INSTRUCTIONAL FEES

The basic fee covers registration, the keeping of student records, and the use of the library. Fees for courses audited are the same as those taken for credit. The university offers a waiver of instructional fees to dependents of employees, graduate assistants, and to certain foreign students. Senior citizens may be eligible for a waiver of certain fees. Additional information concerning instructional fees and waivers is available through the Controller's Office.

	PA Resident	Residents of Other States
FULL-TIME: per semester		
Undergraduate: 12 through 18 credits	$840 per semester	$1,538 per semester
Undergraduate: over 18 credits	$840 plus $70/ extra credit	$1,538 plus $128/ extra credit
Graduate: 9 through 15 credits	$840 per semester	$936 per semester
Graduate: over 15 credits	$840 plus $93/ extra credit	$936 plus $104/ extra credit
PART-TIME: per semester		
Undergraduate: under 12 credits	$ 70 per credit	$128 per credit
Graduate: under 9 credits	$ 93 per credit	$104 per credit
SUMMER SESSIONS:		
Undergraduate:	$ 70 per credit	$ 70 per credit
Graduate:	$ 93 per credit	$ 93 per credit

A student shall be classified as a Pennsylvania resident for instructional fees purposes if he or she has a Pennsylvania domicile.

Domicile is the place where one intends to and does in fact permanently reside. Because the determination of whether a student intends to reside indefinitely in Pennsylvania is necessarily subjective, documentary evidence, statements from disinterested persons, and the presumptions set forth below will be considered.

a. Continuous residence in Pennsylvania for a period of twelve months prior to registration as a student at a college or university in the Commonwealth creates a presumption of domicile. Although one is presumed not to be a domiciliary if one has resided for a shorter period before attending a college or university, a student may rebut this presumption by convincing evidence.

b. A person attempting to establish domicile must be a citizen or must have indicated by formal action his intention to become a citizen or must have been admitted to the United States on an immigrant visa. A tourist or student (non-immigrant) visa is not proof of domiciliary intent.

c. A minor is presumed to have the domicile of his or her parent(s) or guardian. The age of majority in Pennsylvania for establishing a domicile for instructional fees purposes is twenty-two. However, a minor may prove emancipation and dependent domicile through convincing evidence.

d. A United States government employee or a member of the armed forces who has domiciled in Pennsylvania immediately preceding entry into government service and who has continuously maintained Pennsylvania as his or her legal residence, will be presumed to have a Pennsylvania domicile. Others in government service may, by convincing evidence, establish Pennsylvania as their domicile.

e. A student receiving a scholarship or grant dependent upon domicile, from a state other than Pennsylvania, is not domiciled in Pennsylvania.

A student may challenge his or her residence classification by filing a written petition with the Controller. If the student is not satisfied with the decision made by the Controller in response to the challenge, the student may make a written appeal to Chief Council, State System of Higher Education, within 30 days of the University's determination. The decision of Chief Council on the challenge is final. The effective date of any reclassification resulting from the student's challenge will be determined by the Controller based on when the petition was filed. A student who changes his domicile from Pennsylvania to another state must promptly give written notice to the University.

HOUSING/FOOD SERVICES

Advance Room Deposit (non-refundable)	$ 50.00
(new incoming dormitory students only - Credit on account)	
Room and Board (double room)	$1093.00
Board only	$ 465.00
Private Room (if available) (Extra per semester)	$ 314.00

Includes telephone service (does not include toll charges). Linens and pillows are not provided.

All Residence Hall students are required to participate in the Food Service Program at Mansfield University, except where medical waivers are obtained. Students requiring a special diet for health reasons must obtain a copy of the diet and an excuse from an attending physician and submit both to the Vice President for Student Affairs.

1. COMMUNITY BUILDING FEE (Paid by all students)

Undergraduate	
1 to 6 semester hours	$ 2.50
7 to 9 semester hours	$ 5.00
10 or more semester hours	$ 10.00
Graduate	
1 to 6 semester hours	$ 2.50
7 to 8 semester hours	$ 5.00
9 or more semester hours	$ 10.00

2. TESTING AND COUNSELING FEE

One time: 1st semester only	$ 15.00

3. DIPLOMA FEE $ 10.00

4. LATE REGISTRATION OR LATE PAYMENT FEE

Charged to students who register after the date officially set for registration.

The same fee applies to approved deferred payments.	$ 25.00

5. HEALTH AND EDUCATION FEE

Undergraduate 7 to 11 credit hours	$ 20.00
12 credit hours and over	$ 40.00
Graduate 6 to 8 credit hours	$ 20.00
9 credit hours and over	$ 40.00

6. MISCELLANEOUS

Applied Music fee
All music majors, undergraduate, all semesters — $ 90.00 per semester

Graduate or part-time students or non-music majors taking lessons — $ 90.00 per applied music credit

Med-Tech Fee — $ 25.00
Administrative fee charged to student in the clinical period of the Med-Tech program in lieu of instructional fees payments

Practicum fee for two-year associate degree — $100.00
at Robert Packer Hospital
This fee will be charged each fall and spring semester to full-time students enrolled in the Radiology Technology (X-Ray) and Respiratory Therapy programs at Robert Packer Hospital.

STUDENT ACTIVITY FEE

Full-time undergraduate (12-18 S.H.) — $ 62.50
Part-time undergraduate (7-11 S.H.) — $ 31.25
Graduates optional at same rates

ABOVE FEES PAYABLE TO MANSFIELD UNIVERSITY ARE REQUIRED PRIOR TO REGISTRATION.

CERTIFICATION FEE — $ 15.00
Charged prior to graduation for a Pennsylvania Teaching Certificate

CREDIT BY EXAMINATION (per examination) — 1/3 of the undergraduate fee per credit

MILLER ANALOGIES TEST FEE — Contact Placement Office for Fee

TRANSCRIPT FEE — $ 2.00
A student may be issued one free unofficial transcript each semester while in attendance at Mansfield University. After the first transcript has been issued, a charge of $2.00 is made for each additional transcript.

When not enrolled, one free transcript will be provided with the same charge of $2.00 for each additional transcript.

THE ABOVE FEES PAYABLE TO MANSFIELD UNIVERSITY

ROTC - Uniform Deposit — $ 60.00
(Required for Advanced Course Students, optional in Basic Course. Refunded less cost of items not returned.)
DEPOSIT PAYABLE TO BUCKNELL UNIVERSITY

REFUND POLICY

Partial refunds of institutional fees will be made according to the following schedule only when:

A. A student voluntarily withdraws from the university because of personal illness, certified by an attending physician, or because of such other reasons as may be approved by the Provost/Vice President for Academic Affairs.
B. In the case of part-time students dropping credit hours.
C. Full-time undergraduate students reducing their academic program below twelve semester hours and full-time graduate students reducing their academic program below nine semester hours (schedule changes must be approved by the Registrar).
D. In the case of full-time students dropping overload credits, in excess of eighteen undergraduate credit hours or fifteen graduate credit hours, to within basic fee.

NOTE: Drop cards should be processed promptly to avoid possible financial penalty.

	INSTRUCTIONAL FEE:	**ROOM REFUND:**
1st Day	100%	100%
1st Week	80%	80%
2nd Week	80%	80%
3rd Week	70%	70%
4th Week	60%	60%
5th Week	50%	50%
6th Week	None	None

Dining will be charged at the prevailing rate per week for the period used. A student using dining on Sunday will be liable for payment for the entire week. Dining is charged until dining ticket is received in the Revenue Office regardless of whether the student uses it. No refund is made for fees other than instructional fees and room and board as outlined above. **FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE.**

DELINQUENT ACCOUNTS

Students will not be permitted to receive grades, to enroll for any semester, to receive a degree, or to have honored a request for a transcript of records until all overdue accounts have been paid. Students withdrawing from the university during a semester will be required to receive clearance of all accounts from the Revenue Office. **DELINQUENT ACCOUNTS WILL BE TURNED OVER TO A COLLECTION AGENCY AND ALL APPLICABLE COLLECTION COSTS PASSED ON TO THE STUDENT.**

SUMMARY OF TYPICAL FULL-TIME UNDERGRADUATE EXPENSES PER SEMESTER

(Fees subject to change without notice)

IN-STATE

	Residence Hall	**Commuter**
Instructional Fees(12-18credits)	$ 840.00	$ 840.00
Room and Board (double)	$ 1093.00	
Building Fee	$ 10.00	$ 10.00
Testing & Counseling (1st semester only)	$ 15.00	$ 15.00
Health and Education Fee	$ 40.00	$ 40.00
Activity Fee	$ 62.50	$ 62.50
Books & Supplies (approximately)	$ 150.00	$ 150.00
	$2210.50	**$1117.50**

OUT-OF-STATE

	Residence Hall	Commuter
Instructional Fees (12-18 credits)	$1538.00	$1538.00
Room and Board (double)	$1093.00	
Building Fee	$ 10.00	$ 10.00
Testing & Counseling (1st semester only)	$ 15.00	$ 15.00
Health and Education Fee	$ 40.00	$ 40.00
Activity Fee	$ 62.50	$ 62.50
Books & Supplies (approximately)	$ 150.00	$ 150.00
	$2908.50	**$1815.50**

FINANCIAL AID

Student Financial Aid Office provides information and assists students in meeting college expenses. It attempts to inform the students of application procedures and deadlines, types of aid available, eligibility requirements, and other pertinent data.

As a state university, Mansfield's basic fees are substantially lower than those of private colleges; the public subsidy is reflected in the fees to all students. While remaining committed to offering financial aid to able students who can show evidence of financial need, Mansfield University must however, recognize that the basic financial responsibility of acquiring a higher education continues to be the obligation of the student and his/her family.

Matriculation at Mansfield University is by semester; the university expects each entering student to be able to meet the expenses of the upcoming term without assistance unless such aid has been previously arranged and confirmed. Mansfield University participates in the major federal and state financial aid programs. The types of aids that are available include the Pell Grant, PHEAA state grant, and the three campus based aid programs. The three programs are College Work Study, Supplementary Educational Opportunity Grant, and the National Direct Student Loan. Students may also apply for the Guaranteed Loan through their local bank.

The following points are emphasized:

1. Students should file for financial aid immediately upon confirmed admission to Mansfield University.
2. To apply for aid, all students, regardless of the state in which they live, must file the PHEAA/Federal Student aid application and the institutional (pink) application. The filing of these two documents constitutes a completed application for all available types of aid with the exception of the Guaranteed (bank) Loan application which may be obtained from the student's hometown bank. Out of state students who have filed the Financial Aid Form (FAF) are also required to file the PHEAA/Federal Student Aid application if they file the pink form.
3. The important deadline dates for campus based aid are April 15 for fall semester and summer sessions and November 1 for spring semester. PHEAA also has a deadline date of May 1 for the following year for in-state students.
4. Students should be advised that they must mention Mansfield University (code 011046) as an institution of choice on the PHEAA/Federal Student Aid application. Failure to do this will mean that your needs analysis will not be available to Mansfield University.
5. Refer to the Financial Aid brochure for details on financial aid programs available, on deadline dates, and other particulars. Students and parents may call the Financial Aid Office at 717-662-4129 for consultation at any time.

PART-TIME CAMPUS EMPLOYMENT

Part-time student employment at the university is available in the library, residence halls, grounds and buildings, student union facilities, and offices. Such employment is awarded to students who have shown evidence of financial need. Requests for student employment are made after formal acceptance and payment of the advance registration deposit. Applications are available from and submitted to the Office of Financial Aid. Students must have a current PHEAA/Federal Aid form and pink application on file to establish eligibility.

ACADEMIC PROGRESS

Federal regulations require that a student must be making academic progress in order to continue receiving financial aid in any of the Title IV programs. The Title IV programs include College Work Study, National Direct Student Loans, Supplemental Education Opportunity Grants, Pell Grants, and Guaranteed Student Loans.

In order to be making "satisfactory progress" a student must pass at least 24 credits of college work per academic year. Records will be monitored each year at the end of the fall and spring semesters. If at the end of the fall semester a student does not complete 12 credits, a warning letter will be issued. If at the end of the spring semester the student has not passed 24 credits, the student will be notified that he/she will not be eligible for aid for the following academic year or until the deficiency has been corrected. Students may enroll for credits during the summer and those credits can be totaled with prior credits to satisfy the 24 credit requirement. If aid is terminated for one semester, then it will be reinstated for the following semester after the 24 credit requirement has been satisfied. Special students are not eligible for the above aid.

Repeating credits already passed will not count towards the 24 credits. If a student registers for 12 credits in the Fall and receives a D grade in a 3 credit course and again schedules 12 credits for the Spring semester and repeats the D grade course the student will only be credited with 21 credits towards progress.

In addition to the 24 credit requirement, students must maintain the necessary quality point average (Q.P.A.) as outlined in the section entitled **MINIMUM ACADEMIC REQUIREMENTS.**

If a student falls below the minimum grade point requirements, he/she will be allowed one semester of aid on probation. If the required QPA for the corresponding attempted credits is not reached, then aid will be terminated until the required level is achieved.

Students making academic progress will be able to receive aid under the Title IV programs for a period of five academic years. Part-time students will be entitled to aid over a period of time on a prorated amount based on the part-time enrollment.

Academic years completed	1	2	3	4	5
Number of credits successfully completed-	24	48	72	96	128

MITIGATING CIRCUMSTANCE:

Students who do not meet the academic progress requirement may appeal to the Director of Financial Aid to have aid restored based upon certain mitigating circumstances. These mitigating circumstances may be due to illness, family problems, or other personal problems. The student must provide, in writing, a detailed explanation as to the circumstances involved. The student may be required to provide documentation such as a letter from a doctor or other professional who may have provided treatment.

VETERANS BENEFITS

Eligible students may qualify for Veterans Educational Benefits as well as financial aid. The application procedure for financial aid is the same as that outlined for any regular student. Students may qualify for Veterans Educational Benefits through several different programs run by the Veterans Administration. These forms are available through the veterans certifying official on campus, Room 109, South Hall.

SCHOLARSHIPS

A variety of scholarships are available annually to undergraduate students. Students may apply who have been admitted to the university and who meet the stated criteria which generally include a record of academic excellence, school/community service, a demonstration of leadership and, in some cases, a demonstration of financial need.

While the number and amount of the scholarships may vary from year to year, approximately 50 will be available for 1986/87. The average award of $1,000 is more than 50% of the annual tuition costs for a Pennsylvania resident, and nearly 50% for out-of-state residents. A description of available scholarships can be found in the Directory.

STUDENT LIFE AND SERVICES

The educational experience an individual receives at Mansfield extends beyond the walls of the classroom. Students gain knowledge from meeting others, sharing ideas and becoming involved in the formal and informal opportunities that exist in a broad range of activities and services available to them.

ORIENTATION

New Student Orientation is a program aimed at helping students bridge the gap from either high school or their previous college experience and it provides an opportunity, through diagnostic testing, to evaluate a student's strengths and needs in the areas of math, writing and reading.

Students entering in the fall are asked to participate in one of several two-day orientation sessions that are conducted throughout the summer while students entering in January participate in a similar program held just prior to the opening of the semester.

RESIDENCE LIFE

Recognizing the value of the experiences that students obtain in the community living environment, Mansfield University requires students not commuting from home to live in campus residence halls. To help enhance this experience, the Residence Life Staff works with student staff (RA's), the residence hall councils, and interested faculty in an effort to provide a positive environment which will help supplement and expand the education of each student.

Residence Requirements

1. All students are required by the university to reside in residence halls when there is space available.
2. Exceptions to the above may be made on the basis of age, place of permanent residence, or marital status.
3. Each student, prior to occupying a room, must sign a **Residence Hall Agreement** provided by the university and pay all designated fees and deposits.
4. Board in the university dining hall is mandatory for students residing in residence halls. Exemptions for medical reasons may be requested through the Office of the Vice President for Student Affairs.
5. All students residing in residence halls are required to abide by regulations as prescribed by the university and/or residence hall council.
6. Mansfield University reserves the right to enter and inspect all residence hall rooms but will, in all possible circumstances recognize and respect the individual's right to privacy.
7. Checking into a university residence hall implies acceptance of terms of the **Residence Hall Agreement.**

STUDENT ACTIVITIES AND STUDENT UNION

A broad range of social, recreational, cultural, and ethnic programs is coordinated through the Student Activities Office. Students are encouraged to participate in activities in order to expand their development and exposure to different ideas.

The Student Union, Memorial Hall, contains a snack bar, commuter lounge, electronic game room, pool/Ping-Pong room, quiet game room, large screen TV viewing room and the offices for Student Government and the student newspaper.

STUDENT ORGANIZATIONS

There are approximately 80 active clubs and organizations that provide both cocurricular and extracurricular activities for our students. Honorary, social, athletic, departmental and special interest organizations exist to provide both an outlet for student energies and to supplement classroom learning.

STUDENT GOVERNMENT ASSOCIATION

The MU student governing body is the Student Government Association (SGA). An Executive Council, consisting of the president, vice president, treasurer and secretary, works in conjunction with a senate composed of one senator for each 100 students. Through a system of committees, S.G.A. works as an advocate for student interests and provides a collective voice for the student body.

MANSFIELD UNITED CAMPUS MINISTRY

The Mansfield United Campus Ministry represents, through its ecumenical presence, the church on campus and the Christian concern for the spiritual dimension in the development of the whole person. Through word, witness, and worship, it fosters among students and faculty a ministry of service rooted in faith, hope, and love. The service takes the form of a variety of programs designed to meet not only the needs of the university community but also the needs of the community at large, such as ministry to the aged and orphans, workshops and seminars on contemporary religious issues, prayer and Bible study groups, folk liturgies and experimental worship.

INTERCOLLEGIATE ATHLETICS

Mansfield has a variety of men's and women's varsity intercollegiate athletic teams including football, wrestling and baseball for men, volleyball, field hockey and swimming for women and tennis, cross-country, basketball and track/field for both men and women. Playing facilities, coaching services, equipment, travel funds and other resources are supported by both the university and through an allocation from Student Activity Fees.

The university is a member of the National Collegiate Athletic Association and the Pennsylvania Athletic Conference. The standards which govern the athletic programs are in compliance with the policies of these bodies.

INTRAMURAL RECREATION

A program of intramural recreation activities including men's, women's, and coed leagues and tournaments in flag-football, softball, volleyball, basketball, tennis, badminton, archery, inner tube waterpolo, inner tube water basketball, cross-country, and track and field are provided for those seeking fun and enjoyment through physical activities. Most activities are conducted in the late afternoon and evening hours.

In addition to organized activities, facilities in our recreation center, Decker Gym, and our pool are also available for open recreation.

HEALTH SERVICES

Primary health care is provided to our students by the staff of the North Penn Clinic. Student visits, medications and most prescription drugs are provided at no additional cost.

In addition to the staff of the clinic, both residence hall staff and campus police receive appropriate training allowing them to handle medical emergencies and our community ambulance service is available on a 24-hour basis to transport serious emergencies to local hospitals.

HEALTH INSURANCE

Students are required to have some form of health/accident insurance. The university makes available, to those who don't have their own, a comprehensive hospital, surgical and medical insurance program which provides full calendar year protection against the cost of injury or illness.

MOTOR VEHICLES

Students with motor vehicles must register them at our campus Police Office within 24 hours of bringing them to campus.

The university reserves the right to designate and assign parking areas for student use.

POLICIES

A series of policies and procedures governing a student's social and academic conduct and the rights and responsibilities of individuals while enrolled at Mansfield University can be found in the student handbook, **THE PASSWORD**. It is each student's responsibility to become familiar with these policies and procedures which cover The Student Conduct Code, policies governing plagiarism, cheating and academic integrity as well as other related policies.

CENTER FOR ACADEMIC DEVELOPMENT

The Center for Academic Development provides the Mansfield University student with a central location to use developmental services provided by the university for the successful pursuit of his/her academic program.

Services of the Center include: Advising/Counseling, Learning Resources, Equal Education Opportunity Program, and Career Development and Placement Services. Students are encouraged to use the variety of services of the center which is located in South Hall.

ADVISING/COUNSELING CENTER

The Advising/Counseling Center assists students in a variety of ways related to their academic work. The Center is responsible for the advising of all undeclared students, special students, early studies students, and transfer students who come to Mansfield with less than 30 credits. In addition, students who are readmitted or reinstated to the university, as well as all students whose Quality Point Average (Q.P.A.) drops below a 2.00 are required to be advised through the Advising Center.

The major role of the Advising/Counseling Center is to assist students in planning their academic program. The advisors provide students with current information on procedures and policies relating to their academic programs. Students can get advice in a variety of areas - how to study, how to set up a study schedule, what majors are available at the university, what courses are needed for various majors, how and where to get tutoring for courses, etc. Advisors also provide information on how to contact other offices and centers on campus to help students receive help or information in areas such as tutoring, counseling, and career guidance.

Students are also invited through counseling available at the Center to explore freely and in complete confidence, problems, feelings, and information designed to increase their self-understanding and growth in the direction of individual choice. Professional staff members assist this process through and by providing information needed by the student that will allow meaningful decisions to be made. Programs are conducted in Residence Halls and on campus to provide information on topics of interest to students for their personal and social growth.

All students who are assigned to the Center are required to make weekly contacts with their advisor throughout the year. If there are any concerns with grades, a student may visit an advisor during pre-registration and registration or after mid-term grades are received. An advisor can help the students make specific plans and take specific action to improve their work and their Q.P.A.

The goal of the Center is to help students adjust to college and do well academically and personally.

LEARNING RESOURCES

The Learning Resource Center is intended for the acquisition, development, improvement, remediation, maintenance and review of personal learning skills. The LRC is responsible for the diagnostic testing program required for all entering freshmen and transfer students. It is the place where students receive assistance, not only with the basic skills, but with academic subjects.

The Center is staffed by both professionals and para-professionals who are trained to assist students in mathematics, reading, writing, and study skills. A peer tutorial component is also housed within the Center to give assistance to individuals or small groups in most subject areas.

EQUAL EDUCATION OPPORTUNITY PROGRAM

The Equal Education Opportunity Program (EEOP) assists individuals who have the potential to be successful college students but who do not qualify for regular admission to the university. EEOP enables such individuals to enroll with support services: tutoring, counseling, academic and financial aid advisement.

At present EEOP includes two academic programs. The Act 101 Program is for students whose cultural, economic, and educational disadvantages might impair their ability to pursue higher educational opportunities successfully. The Academic Opportunity Program (AOP) is designed for students who did not do well enough in high school to qualify for regular admission to Mansfield University. Both programs also assist students who have been out of school for a long time and who consequently need to sharpen their academic skills in order to do well. Selected freshmen are required to attend a comprehensive summer academic enrichment program in skill development and acclimation to the university environment.

Students accepted to the EEOP become regular matriculated students with the same opportunities and responsibilities as other students. Both programs are housed in South Hall.

CAREER DEVELOPMENT AND PLACEMENT SERVICES

The Career Development function provides an opportunity for student self-evaluation, occupational skills and interests evaluation, and vocational outlook opportunities. A career library is available to those students wishing to pursue their interests in depth.

The Placement Service's basic function is to assist students in securing meaningful employment upon graduation. Job vacancies, civil service opportunities, and teacher vacancies are publicized to seniors and alumni who are registered with the Center. On campus interviews are scheduled and conducted by representatives of business, industry, public schools and civil service agencies. Students' placement credentials are available to potential employers upon mutual request. It is important, therefore, that students desiring interviews with potential employers, or who are applying for positions, be registered with the service and have credential folders completed. A Placement Service fee is charged graduates.

This office also serves as a testing center for national testing programs relevant to students' future goals such as the Graduate Record Examinations, Miller Analogies Tests, and the National Teacher Examination to name a few.

INTERNATIONAL STUDENTS

The International Students Program will advise and counsel, international students as well as assist the Office of Admissions with recruitment and immigration procedures. Infromation will be coordinated on programs for study abroad, foreign and faculty exchange, and international interaction. The International Studies Program is involved with the National Association for Foreign Student Affairs, the Pennsylvania Consortium for International Education.

ACADEMIC POLICIES

GRADUATION REQUIREMENTS

To graduate from Mansfield University with a baccalaureate degree, a student must (1) pass a minimum of 128 semester hours plus any 090 courses required, (2) earn at least a 2.00 quality point average in all work attempted and in the major, and (3) complete the requirements for general education and for the major. To graduate with an associate degree a student must pass a minimum of sixty-four (64) semester hours plus any 090 courses required. Any 090 courses taken will increase the total number required for graduation.

No student may be granted and receive a baccalaureate degree from the university without a minimum residence of one year. A minimum of thirty-two (32) semester hours of work earned on campus will meet the requirements for one year residence. For the associate degree at least fifteen (15) semester hours must be taken from Mansfield University.

This minimum residence requirement usually means that the senior year is taken at the university; exceptions may be made with the approval of the Office of the Provost/Vice President for Academic Affairs. No more than sixty-seven (67) hours from a two-year junior or community college will be accepted as transfer credit toward a baccalaureate degree.

It is the student's responsibility to know the university requirements for graduation and those of his or her major.

BENCHMARK COURSES

All students attending Mansfield University are required to take Diagnostic Placement Testing to assure a minimal starting level of skill in written communication, in computation, and in reading. Unless they are exempted on the basis of the results of these tests, or appropriate transfer courses, ENG 090 (Basic Writing Skills), MA 090 (General Mathematics), and ELE 090 (Basic Reading and Study Skills) are required. All credits earned for 090 courses increase the minimum number of semester hours required for graduation. Although 090 course credits count toward graduation, it is possible that the minimum number of credits required for graduation could increase up to 137 credits. This would be the case if a student were required to complete all three 090 courses.

Policy requires that any 090 courses be taken during the first 57 semester hours attempted.

GENERAL EDUCATION PHILOSOPHY

Within a set of required and elected courses the General Education Program at Mansfield University is intended to accomplish the following objectives:

1. Insure those basic communication and quantitative skills necessary to be successful in college and beyond.
2. Provide the opportunity to learn about the many kinds of human knowledge and its importance when considering humanity in relationship with the world.
3. Encourage the greater understanding and sophistication that a liberal education allows when viewing the world.
4. Prepare for a specialization of interest (major) by developing new interests, knowledge, and skills necessary for advanced levels of study.

Since incoming students may not have a future area of study in mind at the time of entrance, the General Education Program is structured broadly and offers alternative course selections to meet individual needs and interests.

If an entering student is not ready to choose a major, he/she will be designated in the undeclared category and will be assigned an advisor selected to work with undeclared students.

The advisor will assist students in choosing courses to fulfill General Education Requirements and advise them of exploratory means to select a major. It is important that the undeclared student choose a major as soon as possible but not later than the end of two years, or sixty-four (64) credit hours.

PROGRAM OVERVIEW

There are three types of courses in General Education: Core, Distribution Requirements, and General Education Electives.

CORE COURSES

Core courses are those so important to the education of all students that they are required of every undergraduate student attending the University in a Bachelor's Degree Program. These include English Composition, Oral Communication, an Introduction to one of the Fine Arts, and Health and Physical Education courses. A total of fifteen (15) credits is required.

DISTRIBUTION REQUIREMENTS

The General Education Distribution Requirements are satisfied by basic, foundational courses in the Liberal Arts and Science Disciplines. Within the five groups of disciplines identified below the student must choose those approved courses, based upon interest or major, which allow completion of the minimum credit requirement in four of the five areas.

DISTRIBUTION ELECTIVES

In addition to those introductory courses specifically approved for use in the General Education Groups, students may also select any course, regardless of level (100-400's), from these same disciplines as General Education Electives. Such courses allow the student to go beyond the foundational level in a Liberal Arts area should he/she choose to do so. Art, Music and Theatre courses may be used as electives.

A special group of introductory courses in certain professional departments has also been provided as an acceptable General Education Elective. This permits the student to investigate one professional program as a possible major or minor within General Education. If this area is then elected as a major the course must be replaced with an elective other than one in the major.

PROGRAM REQUIREMENTS

CORE REQUIREMENTS: (15 CREDITS)

COMMUNICATION SKILLS (9 CREDITS)
- COM 101 Oral Communication (3)
- ENG 112 Composition I (3)
- *ENG 313 Composition/Literature II (3)

HEALTH AND PHYSICAL EDUCATION (3 CREDITS)
- HPE 100 Health (2)
- HPE 101-151 Physical Education (1-3)

FINE ARTS (3 CREDITS)
- ARH 101 Introduction to Art (3)
- MUS 100 Introduction to Music (3)
- THT 110 Introduction to Theatre (3)

*ENG 313 must be passed with grade of "C" or better. Transfer students who come already having taken a year of composition will receive credit for ENG 112 and for electives. All students should take ENG 112 (and ENG 090 if necessary) during their first year. A junior level literature/composition course may be accepted in transfer as satisfying the ENG 313 requirement.

DISTRIBUTION REQUIREMENTS (SEE SPECIAL RULE SEVEN)

GROUP I, HUMANITIES (MINIMUM 9 CREDITS)

ENG 113 Introduction to Literature (3)
ENG 205 Mythology & The Modern World (3)
ENG 206 The Short Story (3)
ENG 210 Literature of the Western World I (3)
ENG 211 Literature of the Western World II (3)
HST 101 Western Civilization I (3)
HST 102 Western Civilization II (3)
HST 104 The World in the 20th Century (3)
HST 201 American History thru the Civil War (3)
HST 202 American History - Reconstruction to Present (3)
PHL 201 Introduction to Philosophy (3)
PHL 202 Philosophy and Contemporary Issues (3)
PHL 230 Introduction to Logic (3)
PHL 240 Ethics (3)
HON 100 Humanities I (3)
HON 101 Humanities II (3)

GROUP II, FOREIGN LANGUAGES (MINIMUM 6 CREDITS)
Any courses offered by the Foreign Language Department will satisfy this requirement.

GROUP III, NATURAL SCIENCES (MINIMUM 9 CREDITS)
AST 105 Exploration of the Solar System (3)
AST 106 One Possible Universe (3)
AST 108 Observing the Autumn Sky (1)
AST 109 Observing the Winter Sky (1)
AST 110 Observing the Spring Sky (1)
AST 111 Observing the Summer Sky (1)
BIO 101 Man and the Biological World (4)
BIO 102 Contemporary Biological Problems (3)
BIO 210 Zoology (4)
BIO 220 Botany (4)
CHM 101 Introductory Chemistry (4)
CHM 102 Organic and Biochemistry (4)
CHM 103 Environmental Chemistry (3)
CHM 111 General Chemistry I (4)
CHM 112 General Chemistry II (4)
GEL 101 Earth Resources and Energy (3)
GEL 102 Environmental Geology (3)
GEL 121 Physical Geology (3)
GEL 122 Historical Geology (3)
PHY 130 Household Physics (3)
PHY 151 Conceptual Physics I (4)
PHY 152 Conceptual Physics II (4)
PHY 188 General Physics I (4)
PHY 211 General Physics II (4)

GROUP IV, MATHEMATICS (MINIMUM 6 CREDITS)
Any course offered by the department of mathematics will satisfy this requirement.

GROUP V, SOCIAL SCIENCES (MINIMUM 9 CREDITS)
ANH 101 Cultural Anthropology (3)
ANH 102 Human Origins and Evolution (3)
ECO 101 American Economy:Macro (3)
ECO 102 American Economy:Micro (3)
ECO 204 History of Economic Thought (3)
ECO 205 Contemporary Economic Problems (3)
GEG 101 World & Regional Geography (3)
GEG 102 Human Geography (3)
GEG 111 Physical Geography (3)
GEG 222 Environmental Land Use and Natural Resources (3)
HON 201 Social Science (3)
PSC 100 Introduction to Politics (3)
PSC 101 American Politics (3)
PSC 210 State and Local Politics (3)
PSC 212 Intro to Comparative Government and Politics (3)
PSY 101 Introduction to General Psychology (3)
PSY 210 Psychology of Family Relations (3)
PSY 290 Life Span Development (3)
SA 200 American Minorities (3)
SOC 101 Introduction to Sociology (3)
SOC 121 Contemporary Social Problems (3)

DISTRIBUTION ELECTIVES (SEE SPECIAL RULE FIVE)
Courses at any level (100-400) may be chosen from the listed course prefixes (Disciplines) as Distribution Electives.

SPECIAL RULES APPLY TO THE MAXIMUM ALLOWED IN ANY "GROUP".

GROUP I, HUMANITIES
ARH (Art History), ART (Art), ENG (English), HST (History)
HON (Honors), MUS (Music), PHL (Philosophy),
COM (Communication), THT (Theatre)

GROUP II, FOREIGN LANGUAGES
FR (French), GER (German), SPA (Spanish)

GROUP III, NATURAL SCIENCES
AST (Astronomy), BIO (Biology), CHM (Chemistry),
GEL (Geology), PHY (Physics)

GROUP IV, MATHEMATICS
MA (Mathematics)

GROUP V, SOCIAL SCIENCES
ANH (Anthropology), ECO (Economics), GEG (Geography)
HON (Honors), PSC (Political Science), PSY (Psychology)
SOC (Sociology)

PROFESSIONAL ELECTIVE (SEE SPECIAL RULE 11)

Approved Professional Courses from the following:
BFC 217 Fish Management (3)
CIS 103 Introduction to Microcomputers (3)
CJA 100 Introduction to the Administration of Criminal Justice (3)

ED 100 Schools and Society (3)
HEC 111 Introduction to Nutrition (3)
RPL 102 Introduction to Regional Planning (3)
SPE 101 Exceptional Persons in Society (3)
SWK 101 Human Services (3)
TRT 102 Introduction to Travel-Tourism (3)

SPECIAL RULES

The following special rules govern this General Education Program:

1. Every student must satisfy the minimum requirements of four out of five "Groups" listed under Distribution Requirements.

2. A student may use only six credits from his/her major discipline to fulfill General Education Distribution Requirements (Groups) and General Education Electives. Professional courses are excluded except under special rule 11.

3. No more than two courses with the same prefix, of three or four credits may be taken to satisfy the Distribution Requirements (Groups).

4. No more than 18 credits from approved courses or disciplines is permitted in Groups I, III, and V, either from those courses approved as Distribution Requirements or as electives. For example, twelve credits in Group I from approved courses and six credits from the same Disciplines used in the elective area is the maximum allowed in the Humanities.

A maximum of 12 credits with the same course prefix is permitted as distribution requirements.

No more than 12 credits is permitted in Groups II and IV, either as Distribution Requirements or Electives.

5. Any specific course, or courses from Disciplines approved for General Education, from the above lists may be used as Distribution Electives.

6. A minimum of 42 credits in Distribution Requirements and Electives is required.

7. Six credits in a single language is required when completing the Foreign Language Group minimum.

8. One Physical Education credit may be earned by registering for HPE 205 after participating in Intercollegiate Athletics.

9. Physically handicapped students may complete the HPE 101-151 requirement by special arrangement.

10. Students pursuing a Bachelor of Music Degree (BM) are required to fulfill all core requirements and must complete four out of five groups under Distribution Requirements from the approved course list in order to complete General Education. Distribution Electives are not allowed. MUS 100 may not be taken in the Fine Arts Core. This will result in a General Education Program of 45 to 48 credits for these students.

11. One Professional Elective is allowed from those approved. However, it must be replaced should the student subsequently choose to major in that field.

PROGRAM REQUIREMENTS

The requirements of a student's major are reflected on an Evaluation Record (ER) which is maintained in the Registrar's Office. Students will retain the original Evaluation Record provided them upon admission unless a change of curriculum form is provided by the student, carrying his or her signature indicating the student elects to "accept" a revised program. Students who break continuous enrollment for more than one semester, however, will be given the new Evaluation Record for the program should they readmit, unless circumstances suggest a petition of this policy. Curriculum change will affect only incoming students or those who "consent" to changes affecting the program originally provided.

Students readmitted following a break of more than one semester fall under all college policies in effect at the time of readmission.

Revised Evaluation Records will be prepared twice each year. When necessary, all curriculum changes approved will be collected and reflected in Evaluation Records issued in fall and spring registrations. Students changing from one curriculum to another, or to a revised program, will be

processed for the earlier of these two program dates. If courses are deleted from programs for which no substitute is identified, the program requirement will be considered dropped. Otherwise, the department involved should identify the new equivalent required of students in the original program who have not yet satisfied the previous requirement.

PROGRAM VARIANCE

Under special circumstances, students may have curriculum requirements modified. Within its department offerings, a department may substitute or waive course requirements by informing the Registrar of such circumstances and identifying the requested program change(s). When a program variance involves courses offered by other departments, a Petition to the Faculty form is required.

INDEPENDENT STUDY

Independent Study is available in each curricular field. The appropriate curricular area prefix precedes the independent course number, 497, and the semester hours are from one to three. Independent Study may be repeated for more than three (3) semester hours total, but one Independent Study project may be for no more than three (3) semester hours.

Independent Study is an activity initiated by the student to increase his/her already advanced knowledge in a particular academic discipline. The subject is examined in an intensive manner with guidance by a faculty member who has special expertise in that subject.

To register for Independent Study, a student prepares a "contract" (available at the Office of the Registrar) which must be approved by the faculty director, chairperson and Provost/Vice President for Academic Affairs. The contract sets forth a topical outline, reading list, and/or other resources, papers on projects to be completed, the courses the student has passes which are the foundation of his/her advanced knowledge in the discipline, and the basis for evaluating the student's work. A copy of the approved contract should be attached to the registration request, and a copy given to the student and faculty director. In no case will Independent Study be approved after the end of the "add period".

VARIABLE SEMESTER HOUR COURSES

In addition to Independent Study, other courses on campus may be taken for a variable credit (e.g., some art courses, internships, and pre-professional experience). Once the number of semester hours for such variable semester hour courses has been established through registration for the course with the Registrar's Office, the number of semester hours may not be changed. A variable credit card must be completed and returned to the Registrar's Office within the first two weeks of the semester.

AUDITING OF COURSES

Students interested in auditing a Mansfield course must declare their intentions in writing to both the course instructor and the registrar prior to the end of the add period.

INTERDISCIPLINARY STUDIES

Frequently studies involving more than one curricular area are offered. Such courses (ID) may be applied to General Education electives and, with departmental approval, may be applied to the major. Specific topics vary and will be announced each semester in the master schedule.

SPECIAL STUDY

A special study course is offered one time only by a curricular area for the purpose of (1) treating subjects of current but not lasting interest, or (2) experimenting with an innovative pedagogical or curricular design. The appropriate curricular design. The appropriate curricular area prefix precedes the numbers 255 for freshman/sophomore level and 455 for junior/senior level. Such courses are listed in the master schedule each semester under the departments offering the courses.

TIME SHORTENED DEGREE

The traditional undergraduate program is eight semesters.

However, there are avenues available at the university that allow a student to earn a baccalaureate degree in less time. Included in these are above average course load, credit by examination, Advanced Placement, CLEP, and credit for military service.

CREDIT FOR MILITARY SERVICE

Veterans with a minimum of eighteen months of honorable service in the United States service branches may apply for credit in HPE (Health) and HPE 101-151 (Physical Education). In addition, credit may be awarded for service training programs based on recommendations in the American Council on Education Guide. Qualified veterans enrolling in Military Science are eligible for placement into the Advanced Course based on their prior service and desire to seek a commission through the Reserve Officers Training Corps program.

GRADUATION OUTLOOK FORM

In order to avoid problems arising from unmet graduation requirements, a Graduation Outlook will be completed by the Registrar's Office. This will be provided to the student prior to registration for the final thirty-two (32) semesters hours of earned credit, or prior to the student's seventh regular semester. Students who are accelerating may request a Graduation Outlook earlier.

The Outlook notes the courses and/or requirements still necessary to be completed for graduation, as well as any deficiency in Q.P.A. A copy of the completed Outlook is sent to the student and his/her department chairperson. However, it is the student's responsibility to review the Outlook for possible discrepancies.

INTERNSHIP PROGRAM

Internships are offered in most degree programs. Students interested are encouraged to participate by making arrangements through their major department. Credit hours vary and must be arranged by contract through the department and the Provost/Vice President for Academic Affairs.

SECOND BACCALAUREATE DEGREE

A student who possesses a baccalaureate degree may earn a second bachelor's degree upon completion of the following requirements: (1) a minimum of thirty-two (32) semester hours at Mansfield following the first degree, (2) completion of all requirements of the major in which the second degree is to be earned, (3) the first degree will be considered to meet the university's General Education requirements, except ENG 313, and (4) grade point average on all work attempted toward the second bachelor's degree of at least 2.0 and all courses in the major of at least 2.0 (internships, student teaching, and observation/participation semester hours are not counted in the required minimum of thirty-two semester hours.)

ACADEMIC MINOR

A minor is composed of no less than 15 and no more than 24 semester hours. A minor is available as an enhancement of the student's academic experience. It is not a degree requirement. In order for a student to successfully complete an academic minor, he/she must attain a grade point average of at least 2.00 in required courses for the minor. Requirements for each minor can be obtained at the appropriate departmental office. The following are approved minors:

ANTHROPOLOGY (CULTURAL)
ART
ASTRONOMY
BIOLOGY
CHEMISTRY
CHILD AND FAMILY STUDIES
CRIMINAL JUSTICE ADMINISTRATION
COMPARATIVE LANGUAGE
COMPARATIVE LITERATURED
ECONOMICS
ENGLISH
ETHNIC STUDIES
FOOD AND NUTRITION
FOOD SERVICE MANAGEMENT
FRENCH
GEOGRAPHY
GEOLOGY
GERMAN
HISTORY
HOME ECONOMICS
INTERNATIONAL STUDIES
MATHEMATICS
MUSIC
PHILOSOPHY
PHYSICS
POLITICAL SCIENCE
PUBLIC ADMINISTRATION
PSYCHOLOGY
REGIONAL PLANNING
SOCIAL WELFARE
SOCIOLOGY
SPANISH
THEATRE
TRAVEL-TOURISM
WRITING

ACADEMIC INTEGRITY

STUDENTS

Students are expected to accept the responsibility for academic integrity. Dishonesty in academic work is unacceptable and seriously erodes the quality of educational pursuits. Faculty are expected to instruct students in the meaning of plagiarism. Plagiarism is to steal and pass off as one's own the ideas and words of another. Where suspected, faculty members are expected to assess instances of academic dishonesty in the interest of maintaining high standards. The matter is primarily between the student and the instructor. Additional assistance is available through the department chairperson and/or the Office of the Provost/Vice President for Academic Affairs.

The student handbook, "The Password," outlines the procedures to be followed in initiating disciplinary action in cases of academic dishonesty.

FACULTY

Faculty are responsible for apprising students of course evaluation criteria, for adherence to the stated criteria, and for determining grades in a fair and equitable manner. Should a student charge that a faculty member has discharged professional duties in an improper, arbitrary, discriminatory, or otherwise unjustified manner, complaints may be properly considered by means of the procedures outlined in the student handbook, "The Password."

ABSENCE POLICY

Regular and punctual class attendance is expected of all students.

Student evaluation expressed as grades will be determined on the basis of academic performance. Professors will outline, in written form, there criteria for academic evaluation prior to the end of the first week of class.

Bona fide excuses because of illness, serious mitigating circumstances, or absences because of official University representation approved by the Vice President for Student Affairs or designee shall be accepted by all faculty, thus permitting the student to make-up missed tests and/or assignments in a reasonable manner and within a reasonable period of time.

Requests for absence from the University must be initiated in the office of the Vice President for Student Affairs and official notification for excused absences will be issued to the faculty by this office.

In courses where classroom participation is an integral component, student attendance is essential and may be expected to bear a relationship to the final grade. If applicable to his/her course, the instructor will explain that relationship when giving criteria for evaluation during the first week of classes.

ADD, DROP, WITHDRAW FROM A COURSE

A student may add a course during the first two weeks of the semester.

A student may drop a course during the first five weeks of a semester without academic penalty. After five weeks, a student may withdraw and a "WP" or "WF" will be recorded on the student's record upon official withdrawal from a course. Course withdrawal after the designated five-week drop period is permitted with the approval of the registrar, the instructor of the course, and the student's department chairperson. A statement in writing from the student's medical doctor, counselor, or close family member must be approved by the registrar before a student is permitted to complete withdrawal procedures.

To drop or add a course during the drop-add period, the student secures the appropriate form from the Registrar's Office, has the form signed by the instructor of the course and by his/her advisor and returns the form to the Registrar's Office.

No notation of a course dropped will appear on the student's permanent record if he/she withdraws during the designated drop period.

A student will receive an "F" in any course from which he/she withdraws without approval.

CHANGE OF MAJOR

Requests to change major must be initiated in the Office of the Registrar.

MAINTENANCE OF MATRICULATION

"Continued matriculation" status applies to students in the following categories:

1. students who have had no interruption in course work of more than one semester
2. in-service teachers in a degree or certificate program who complete a minimum of six semester hours of acceptable course work each year
3. students who are doing approved work consistent with program requirements and thereby meet degree or program requirements in effect at the time of initial matriculation.

WITHDRAWAL FROM THE UNIVERSITY

Students withdrawing from Mansfield must notify the Counseling, Career Development and Placement Office which provides the student with a form that, when completed, clears the student for formal withdrawal. All financial obligations to the university must be met before a student can withdraw from the university in good standing.

Students who withdraw in good academic standing and plan to return within one year of the time of withdrawal should, in addition to completing the withdrawal process, prepare a letter to the Provost (copies to the Office of Admissions and Registrar), citing the reason for withdrawal, intent to return, and expected reentry semester. Students who prepare this statement and return at the cited re-entry semester will be required to file a readmission application but the application fee will be waived. Students following this procedure preserve the degree requirements as they existed at the time of withdrawal.

Students who withdraw without properly notifying the university or who withdraw after the drop period for other than extenuating circumstances (as documented by a physician, counselor, or other appropriate individual) will receive a grade for each course based on work completed.

The university will require students who withdraw without proper notification or after the drop period to wait for one full semester before being readmitted except for extenuating circumstances. All students who have withdrawn and who desire admission to the university must file an application for readmission (see section on "Readmission of Former Students").

PASS/FAIL POLICY

A. Eight courses may be taken under the pass/fail option over the total of four years. A student may take no more than one course pass/fail each semester.
B. No 100 or 200 level courses taken in fulfillment General Education Core, Requirements, or electives may be taken pass/fail.
C. Any 100 or 200 level course may be taken pass/fail but will count only as a free elective.
D. Information that any 100 or 200 level course taken pass/fail will count only as a free elective should be included on the pass/fail option card.
E. Courses required by the major department may only be included in the pass/fail option at the discretion of the department.
F. Pass grades will be "D" or better, and three failures under the option will constitute a loss of the option. Pass/fail courses are not reflected in the quality point average of the student, but will be counted as semester hours earned if a passing grade is received. The student has a two week period at the beginning of the semester to elect to take a course pass/fail. He/she may not change the pass/fail option to a letter grade or select the pass/fail option after the two week add period has passed.

PETITION

When any rule or regulation of the university causes an unfair hardship, the student is entitled to petition for an exception by filing a petition form obtainable from the Office of the Registrar. Advisors are expected to assist in the preparation of a petition. Completed forms should have the necessary signatures prior to submission to the Office of the Provost/Vice President for Academic Affairs for final approval or disapproval.

PERMISSION PROCEDURES TO TAKE COURSES AT ANOTHER INSTITUTION

Matriculated students desiring to take courses at another institution for transfer to Mansfield must complete a "Recommendation for Transfer of Credit to Mansfield University" form prior to undertaking the courses. The form is available in the Registrar's Office.

Courses accepted for General Education must be comparable to General Education courses at Mansfield. Since taking courses at another institution as a means of circumventing the university's General Education program is not desirable, courses are carefully scrutinized.

TRANSCRIPTS

Official transcripts of credits earned on this campus are prepared by the Registrar's Office and issued according to the following policies:

A. Student records are confidential records; transcripts, therefore, are issued only at the written request of the student. Requests by telephone are not acceptable.
B. A student may be issued one free transcript each semester while in attendance at Mansfield. After the first transcript in a semester has been issued, a charge of $2.00 is made for each additional transcript. When not enrolled, one free transcript will be provided with the same charge of $2.00 for each additional transcript.
C. No transcript is issued to or for a student who is indebted to the university until such indebtedness has been paid in full.
D. Official transcripts of credit earned at other institutions which have been presented for admission or evaluation become part of the student's permanent record in the Registrar's Office and are not reissued or copied for distribution. Transcripts from other institutions, if needed, must be obtained directly from the institution in question.
E. No official transcript will be issued directly to the student. A student may have a transcript of his/her academic record for his/her file, but it will not be signed or bear the seal of the university.

COURSE LOAD

A normal academic work load is defined as 12 to 18 semester hours. Any student desiring to carry more than 18 semester hours must obtain permission from the department chairperson and have a 2.60 Q.P.A. for carrying 19 semester hours or a 3.00 Q.P.A. for carrying 20 or more hours.

A student who desires to carry more than 18 semester hours who does not have the appropriate Q.P.A. must submit a petition to the Provost/Vice President for Academic Affairs for permission to carry 19, 20 or more credits.

Students registering for less than 12 semester hours are not eligible to live in campus residence halls without special permission of the Provost/Vice President for Academic Affairs or designee.

CLASS STANDING

Class standing is determined by the total number of semester hours earned including acceptable semester hours transferred from other accredited colleges.

Freshman	0 - 31 semester hours of earned credit
Sophomore	32 - 63 semester hours of earned credit
Junior	64 - 95 semester hours of earned credit
Senior	96 & above semester hours of earned credit

SPECIAL STUDENTS

Special students are nonmatriculated students who fall into special categories, such as:

1. Inservice teachers - inservice teachers working toward certification.
2. High school honor students - high school students participating in the Early Studies Program.
3. Undergraduate college students - students taking courses at Mansfield for transfer to another college or for personal enrichment.

Special students are exempt from the academic standards required of matriculated students. It is recommended that a student matriculate prior to attaining a maximum of 36 semester hours of academic work at Mansfield.

SCHOLASTIC STANDARDS AND REQUIREMENTS

Mansfield University employs the 4-point system, as shown below, in evaluating academic performance:

GRADE	INTERPRETATION	QUALITY POINTS
A	Excellent	4.0
A-		3.7
B+		3.3
B	Above Average	3.0
B-		2.7
C+		2.3
C	Good College Work	2.0
C-		1.7
D+		1.3
D	Passing	1.0
D-		0.7
F	Failure	0.0

In addition to letter grades, the following designations (none of which is figured in the Q.P.A.) are used.

I — Incomplete
S — Satisfactory
U — Unsatisfactory
EX — Credit by Examination
WP — Withdrew passing from the course after the drop-add period with the approval of instructor, the department chairperson, and the registrar.
WF — Withdrew failing from the course after the drop-add period with the approval of the instructor, the department chairperson, and the registrar.
AU — Audited
PF — Pass-Fail
— Off-Campus

The academic standing of each student in every subject is reported at the close of the semester. All regular matriculating students seeking an undergraduate degree must meet the established academic standards of the institution.

The student's quality point average (Q.P.A.) is determined by dividing the total number of quality points earned by the total number of semester hours of work attempted. Note: Semester hours and credit hours are one and the same. The Q.P.A. is the index by which a student's academic standing is judged.

REPEATING A COURSE

An "F" grade in a required course must be cleared by repeating the course.

When a student repeats a course which cannot be repeated for credit then (1) all grades received shall be included on the student's transcript, but (2) only the last grade received shall be used in computing the student's quality point average. Students may not repeat a course on a pass/fail or credit-by-exam basis.

NOTE: Any course may be repeated, not solely courses that were failed. However, the last grade is the one that counts. Therefore, should a student repeat a course in which he or she received a "D" and fails the course the second time, the "F" would be used in computing the student's quality point average and the semester hours earned with the "D" would be erased.

Students who are repeating a course should notify the Registrar's Office.

INCOMPLETE GRADES

An "I" (Incomplete) grade is used to denote unfinished work because of serious mitigating circumstances beyond the student's control. The student is responsible for the removal of an "I" grade within a period of three weeks following the beginning of the next regular semester after the "I" grade was given except in cases where further mitigating circumstances prevail.

Decisions about granting the "I" grade will be made by the professor of the course in consultation with the Registrar as the Provost/Vice President for Academic Affairs' designee.

An incomplete is a privilege granted because of circumstances and not a right to be expected by the student. If the "I" grade is not cleared, the Registrar will record a final grade of "F".

GRADE CHANGES

If an error in computation or transferral requires that a faculty member change the final grade given a student, such a change must be made within the first three weeks of the following semester. No grade changes will be allowed following that time unless a request for an extension was made by the faculty member to the Registrar.

MINIMUM ACADEMIC REQUIREMENTS

The following shall be the minimum academic requirements for continuation at Mansfield.

0-18 semester hours attempted — 1.00 Q.P.A. or better
19-37 semester hours attempted — 1.60 Q.P.A. or better
38-56 semester hours attempted — 1.80 Q.P.A. or better
57 or more semester hours attempted — 2.00 Q.P.A. or better

The grade report issued to students at the end of every marking period serves as the means by which each student is informed of his or her academic standing.

ACADEMIC PROBATION

Students whose Q.P.A. is between the minimum academic requirement and 2.00 at the end of a marking period will be placed on academic probation until the Q.P.A. is 2.00 or above. Probationary status does not mean that the student is dismissed from the university. It means that although the minimum academic requirements have been met, the Q.P.A. is not acceptable for graduation.

Students on probation will receive a letter from the university informing them of their probationary status and their assignment to the Academic Advising Center.

With the assistance of an advisor, students should seek reasons for poor academic work and develop strategies for improvement. The advisor should assist students in having a clear understanding of their potential for dismissal.

ACADEMIC DISMISSAL

Any student whose quality point average is below the minimum academic requirements at the end of the fall or spring semester will be dismissed from Mansfield.

Transfer students are subject to academic dismissal after their first semester only if their Q.P.A. is less than 1.00. After they have completed two semesters at Mansfield, transfer students are subject to the minimum academic requirements. For example, a student who is granted eighteen (18) semester hours of credit in transfer and who is taking fifteen (15) semester hours of work will have attempted a total of thirty-three (33) semester hours at the end of the semester and must earn a Q.P.A. of at least 1.60 to continue.

Students dismissed for not meeting the minimum academic requirements may be readmitted to the university after a one year interval.

Students twice dismissed for not meeting the minimum academic requirements automatically terminate their association with Mansfield.

ACADEMIC STANDARDS REVIEW BOARD

If a student's total quality point average at the end of any semester falls below the minimum standard required to remain in school, a dismissal letter will be sent, notifying him/her of that action. If this is the first dismissal from Mansfield, the student, upon his/her own initiative, has the opportunity to appeal before the Academic Standards Review Board. A reinstated student is eligible to attend universtiy classes.

PROCEDURES — ACADEMIC STANDARDS REVIEW BOARD

A. Once the student has received the first dismissal letter and decides to make an appeal before the Academic Standards Board, an appointment can be made for the hearing by contacting the chairperson of the A.S.R.B.
B. Students who have been dismissed a second time do not have the right to appeal.
C. After a time is scheduled for the hearing, the student is expected to address to the chairperson of the board a written appeal, stating his/her case. The written appeal may be mailed to the chairperson or brought in by the student to the hearing.
D. Before the student presents his/her case to the board, the student's letter will be read by the board. The voting members of A.S.R.B. will consider all necessary records of the student. The student will then be given the opportunity to address the board.
E. Following the presentation of the appeal, the board members will vote to determine reinstatement or denial. Students will then receive immediate notification of the decision as well as stipulations imposed by the board to assist the student in achieving academic success. (Should the student's chairperson or the faculty member of his/her choice fail to appear, the remaining voting members will have the determining votes.) A majority vote of the members will determine the decision on any specific case.
F. Failure to make an appeal before the board will finalize the dismissal.
G. If a student's appeal is denied, he/she may initiate an appeal to the Provost/Vice President for Academic Affairs.

OPPORTUNITIES FOR THE SUPERIOR STUDENT

HONORS PROGRAM

The Honors Program is an academic opportunity for superior students at Mansfield. The program offers special honors courses designed to stimulate in the classroom thought, discussion, and growth. These courses feature small group instruction, specially selected faculty, and ample opportunity for student expression. A significant level of academic achievement is expected of honors students. While hard work is expected of those enrolled in honors, the program environment is a very stimulating one, and honors students are given a number of special perquisites in recognition of their commitment.

The Honors Program is designed to function as a special general education program for honors students. It structures the student's curriculum for the first two years of study, after which time the student's activities center around his/her major department. Each honors student must complete seven courses in the program: Hon 100 and 101 (Honors Humanities), Honors 201 (Social Science Honors), three Honors Electives, and Honors 497 (Senior Honors Project). Of these, the first six are designed to fit into the student's general education program. The last is a capstone course in which the Honors student carries out a directed project that synthesizes in some way the interdisciplinary approach of the Honors Program with the advanced work done in his/her major. This project is then presented, in a formal setting, to the students and faculty of the Honors Program. In addition to these Honors courses, an Honors student is required to complete at least one lab science course as part of General Education.

An Honors student is advised during the freshman and sophomore years by an Honors advisor. This advisor works carefully with the student to assure that the student's general education program is relevant to the student's interests and at the same time challenging. During the first two years, an Honors student must have his/her honors advisor's permission to register for each semester's classes. A departmental advisor is also assigned to the Honors student who has declared an academic major. It is this person's function to monitor the student's progress in meeting departmental requirements for the first two years.

The general education program for Honors students differs from the regular general education program. First, Honors students must take the six previously mentioned Honors courses for general education credit. In completing their general education, however, Honors students are not limited to those lower division courses approved for general education credit for all students. They may instead take as Distribution Requirements or Distribution Electives any courses offered by the departments represented in the five discipline Groups. But the decision of which courses to take is not the student's alone; it must be reached in consultation with, and with the approval of, the student's Honors advisor.

There are a number of privileges associated with membership in the Honors Program. Honors students are permitted to preregister as seniors, therefore receiving first choice with regard to scheduling. Honors students are eligible for certain special Honors scholarships. Each year the program sponsors several events for Honors students, such as attendance at plays or other cultural activities, guest speakers, panel discussions on topics of current interest, and an "Honors Day" which gives Honors students the chance to interact with a nationally known featured speaker.

Honor students are expected to maintain at least a 3.0 (B) overall average, and to make progress in fulfilling honors requirements in order to remain in the program. A student will be considered as making proper progress in the Honors Program if he/she has completed at least two Honors courses by the end of the freshman year and at least five courses by the end of the sophomore year. A student not making sufficient progress will have his/her Honors privileges revoked until the deficiency is remedied. (Exceptions can be made to this rule for students entering the program after the first semester of their freshman year.) A student whose overall average falls below a B will be placed on "Honors probation." Should the average not be raised to 3.0 by the next semester the student will be dismissed, permanently, from the program. (A student may appeal this dismissal to the Honors Council which may, at its discretion, continue the student's probationary status for one additional semester.)

Upon graduating, each student completing the program with at least a 3.0 average in Honors courses will have featured prominently on his/her transcript, "This student has successfully completed the University Honors Curriculum." Each student with at least a 3.5 average in honors work and at least a 3.25 overall average will have prominently noted, "This student has completed the University Honors Program with distinction."

CREDIT BY EXAMINATION

A student enrolled and in good academic standing may request permission to take a comprehensive examination in a particular course offered by the university. This does not include courses in the areas of independent study, ensemble, or other group participation courses, student teaching or pre-professional experience, seminars or selected topics, and laboratory experience unless special permission is provided by the department offering the course and the Office of the Provost/Vice President for Academic Affairs.

All requests for Credit by Examination must be made to the department chairperson involved and approved by the Office of the Provost/Vice President for Academic Affairs. The student must present evidence that he/she is sufficiently competent to warrant the examination. Credit by Examination may not be used as a method to repeat a course where unsatisfactory performance previously occurred.

When a course is passed by examination, credit is earned and the notation "EXS" is recorded on the student's permanent record. A letter grade and quality points are not received. If the student fails the exam, there is no notation on the record. However, since a failed examination may not be attempted a second time, a record of all examinations attempted is kept in the student's file until graduation.

Students will obtain permission and complete arrangements for Credit by Examination within the first two weeks of the semester. Except under unusual circumstances, the examination must be taken during the first four weeks of the semester.

PROCEDURES FOR CREDIT BY EXAMINATION

A. The student contacts the department chairperson of the department which offers the course he/she wishes to take through credit by examination. He/she then obtains the form for credit by examination from the Office of the Registrar.

B. Concurrently or following the above contacts, the student completes a petition explaining the

request and rationale, and presents the petition signed by the above department chairperson to the Office of the Provost/Vice President for Academic Affairs.

C. Authorization to take the specified course credit by examination will be given to the student and must be taken to the Revenue Office where the student pays the fee which is 1/3 of the undergraduate fee per credit (subject to change as per directive by the State).

D. The department chairperson sets the date for the examination and later notifies the Office of the Provost/Vice President for Academic Affairs whether the student passed or failed the examination.

E. If the student passed the exam, the Office of the Provost/Vice President for Academic Affairs will so notify the Registrar who will record the course and "EXS" on the student's semester grade report. The Registrar's Office will then record the course and EXS on the student's permanent record.

COLLEGE-LEVEL EXAMINATION PROGRAM

Mansfield participates in the National Program, CLEP (College Level Examination Program), administered by the Educational Testing Service. Students may take this examination at any time in several subject areas by contacting the Counseling, Career Development and Placement Services. Mansfield University grants credit for CLEP subject examinations but does not give credit for the CLEP general examinations. CLEP is a way to earn college credits for what one has learned and may shorten the college experience. Subject examinations are available in the areas of composition, literature, foreign languages, history and social sciences, science and mathematics, and business.

ADVANCED PLACEMENT

Courses taken before admission to college under the Advanced Placement Program conducted by the Educational Testing Service (Princeton, New Jersey) may be applied toward graduation requirements by students who are admitted to the university to pursue one or more semester's work. A minimum score of "3" is required for award of credit. When test results are received, they are forwarded to the Registrar's Office for evaluation and notification to the student. Not more than twelve credits earned by such examination may be applied toward graduation requirements.

DEAN'S LIST AND PRESIDENT'S LIST

The Dean's List is issued at the close of each semester. It includes only undergraduate students. Students must earn at least (12) credits for which a letter grade is received (P/F and S/U grades are excluded). The semester quality point average must be between 3.50 and 3.99 inclusive. Students who fulfill the above requirements and attain a semester quality point average of 4.00 are on the President's List.

HONORS

Superior scholastic achievement is recognized at Commencement. Such recognition becomes a permanent part of every graduating senior's record, with designations based upon cumulative point average as indicated:

Cum Laude	3.35 to 3.64
Magna Cum Laude	3.65 to 3.94
Summa Cum Laude	3.95 to 4.00

OFF-CAMPUS STUDY

Students wishing to participate in an off-campus study program as a component of the M.U. major program, may do so with the permission and advisement of the major department and the Office of the Provost/Vice President for Academic Affairs. A student participating in such an approved program may elect to study abroad or in an approved American program for a summer term, one semester, or one academic year without breaking matriculation at Mansfield University.

When a student desires such study, he/she should seek the formal permission and approval of the major department and the Office of the Provost/Vice President for Academic Affairs at least one full

semester prior to the beginning date of the study period. Close advisement in the selection and pursuit of such an off-campus study program will be the obligation of the involved student, the departmental advisor and the chairperson of the major department.

It is important that students desiring this special study experience obtain an application packet from the Registrar's Office. This packet will explain procedures to follow in order to remain matriculated, obtain departmental advisement, and receive pre-registration materials necessary for return to the university.

UNDERGRADUATE ADMISSIONS TO GRADUATE COURSES

An undergraduate student at Mansfield may be admitted to a graduate course (500 level) providing the student:

A. Satisfies the requirements for admission with full graduate standing, except for having the bachelor's degree, (as certified by the coordinator of graduate studies.)
B. Is within twelve semester hours of having satisfied all of the requirements for the bachelor's degree, (as certified by the registrar)
C. Has the permission of the course instructor.

The total load of courses, undergraduate and graduate, may not exceed fifteen semester hours.

The graduate course(s) may be applied toward the student's undergraduate total of 128. However, if the graduate credits raise the student's total above 128, the course may count as graduate credit upon conferral of the bachelor's degree. This does not imply automatic admission into the Graduate Division. Admission under these conditions would be on a conditional basis.

THE PROGRAMS

Actuarial Science

PROGRAM: Mathematics-Actuarial Science Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Mathematics

Some Career Opportunities: An actuary is an expert in the design, financing, and operation of all kinds of insurance programs which include life and health insurance, casualty insurance, and public and private pension plans. An employer is likely to be an insurance company, a consulting actuarial firm, government, or a university.

Core Program Courses:

ACC 110	Principles of Accounting I (3)
ACC 111	Principles of Accounting II (3)
BUS 130	Introduction to Business & Management (3)
MGT 305	Fundamentals of Insurance & Risk Management (3)
MA 160	Programming for Math Science (3)
MA 240	Analytic Geometry & Calculus III (3)
MA 241	Analytic Geometry & Calculus IV (3)
MA 250	Applied Probability & Statistics (3)
MA 260	Discrete Structures (3)
MA 280	Linear Algebra & Matrix Theory (3)
MA 308	Operations Research (3)
MA 310	Numerical Analysis (3)
MA 371	Mathematical Statistics I (3)
MA 372	Mathematical Statistics II (3)

plus 6 semester hours of mathematics electives

Prerequisites/Related Requirements: If preparation in algebra and trigonometry is not adequate to permit the student to proceed immediately to MA 140 Analytic Geometry & Calculus I, he/she must complete MA 130 Algebra and Trigonometry. In addition the following courses are required by the major in the General Education Program:

ECO 101	American Economics: Macro (3)
ECO 102	American Economics: Micro (3)
MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
PHY 188	General Physics I (4)
PHY 211	General Physics II (4)

Art History

PROGRAM: Art History

DEGREE: Bachelor of Arts

DEPARTMENT: Art

Some Career Opportunities: Working in museums and galleries, lecturer, preparation for graduate school, private business, etc.

Core Program Courses:

ARH 102	Survey of Art (3)
ART 300	Visual Studies (3)
ART 404	Special Problems in Art (3)

ART HISTORY ELECTIVES (21)
STUDIO ART ELECTIVES (9)

Prerequisites/Related Requirements: In addition the following courses are required by the major in the General Education Program:
6 Semester Hours of Languages 201 & above

Art Studio

PROGRAM: Art Studio

DEGREE: Bachelor of Arts

DEPARTMENT: Art

Some Career Opportunities: Jewelry designers, art store operators, book illustrators, design illustrators, graphic designer, advertising designer, screen illustrator, cartoonists, technical illustrators, medical illustrators, artist assistants, potters, preparation for graduate school, etc.

Core Program Courses:

ARH 225	History of Modern Art(3)
ART 201	Painting (3)
ART 210	Drawing (3)
ART 231	Printmaking (3)
ART 251	Jewelry (3)
ART 261	Waterbase Media (3)
ART 271	Ceramics (3)
ART 281	Sculpture (3)
ART 295	Crafts (3)
ART 300	Visual Studies (3)
ART 345	Fibers (3)

ART HISTORY ELECTIVES (9)

AREA OF CONCENTRATION (I,II,III) (18)

I - Drawing, Painting & Printmaking
II - Ceramics, Jewelry, Sculpture & Fibers
III - Advertising Art

Prerequisites/Related Requisites: Presentation of a portfolio during a personal interview with art faculty for admission into the program.

In addition the following courses are required by the major in the General Education Program:

ARH 102	Survey of Art (3)
ART 241	Color & Design (3)
PSY 101	Introduction to General Psychology (3)

Athletic Training

PROGRAM: Athletic Training
(Recommended sequence of courses with no certificate or degree awarded)

DEGREE: Not Applicable

DEPARTMENT: Health and Physical Education

Some Career Opportunities: Course sequence may enable student to take the N.A.T.A. certification examination to become a Certified Athletic Trainer (A.T.C.). Employment opportunities exist in high schools, colleges, professional sports, clubs, sports medicine clinics, and industry.

Core Program Courses:

BIO 101	Man and the Biological World (4)
HEC 111	Introduction to Nutrition (3)
HPE 206	Athletic Training Lab I (1)
HPE 207	Athletic Training Lab II (1)
HPE 310	Special P.E. for Exceptional Child (3)
HPE 315	Athletic Training (3)
HPE 340	First Aid and CPR (3)
HPE 360	Kinesiology (3)
HPE 370	Physiology of Exercise (3)
HPE 375	Advanced Athletic Training (3)
HPE 376	Athletic Training Lab III (1)
HPE 377	Athletic Training Lab IV (1)
PSY 101	Introduction to General Psychology (3)
PSY 230	Educational Psychology (3)

Prerequisite/Related Requirements:

BRP 103	Human Anatomy (4)
BRP 104	Human Physiology (3)

Biology

PROGRAM: Biology

DEGREE: Bachelor of Arts

DEPARTMENT: Biology

Some Career Opportunities: Laboratory and field technicians for state and federal agencies and private industry; sales representatives for pharmaceutical and biological supply companies; premedical preparation for physicians, dentists, osteopaths, chiropractors, optometrists.

Core Program Courses:

BIO 111	Introduction Cell Biology (4)
BIO 210	Zoology (4)
BIO 310	Ecology (3)
BIO 404	Seminar (1)
CHM 211	Organic Chemistry I (4)
CHM 212	Organic Chemistry II (4)
PHY 191	Physics I (4)
PHY 192	Physics II (4)

Must take Two of the Courses Listed Below:

BIO 330	Plant Physiology(3), or BIO 332 Physiology(4)
BIO 340	Genetics (3)
BIO 355	Microbiology (3)

BIOLOGY ELECTIVES (17-18)

Prerequisites/Related Requirement: In addition the following courses are required by the major in the General Education Program:

BIO 220	Botany (4)
CHM 111	General Chemistry I (4)
CHM 112	General Chemistry II (4)
MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3) OR
MA 105	Introductory Statistics (3) AND
MA 107	Introduction to Computer Programming (3)

It is also recommended that Biology students complete a minor in Chemistry with two additional courses from the following list:

CHM 311	Quantitative Analysis (4)
CHM 332	Instrumental Analysis (3)
CHM 341	BioChemistry (4)

Broadcasting

PROGRAM: Mass Communications - Broadcasting Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Speech, Communications, and Theatre

Some Career Opportunities: Production and on-the-air jobs in radio and television; advertising or production agencies; media equipment sales; cable and satellite broadcasting.

Core Program Courses:

COM 201	Introduction to Mass Media (3)
COM 203	Voice & Articulation (3)
COM 301	TV Program Design (3)
COM 302	Radio Production & Management (3)
COM 304	TV Program Design II (3)
COM 400	Communication Theory (3)
JN 100	Journalism (3)
JN 210	Media Design (3)

Prerequisites/Related Requirements: Related courses determined by individual needs. 30 SH (by advisement). Students are encouraged to use theatre courses as electives by advisement.

Business Administration

PROGRAM: Business Administration

DEGREE: Bachelor of Science

DEPARTMENT: Business Administration

Some Career Opportunities: Accountant, management trainee, marketing representative, management/budget analyst, bank officer, personnel specialist, stock broker customer representative, etc.

Core Program Courses:

ACC 110	Principles of Accounting I (3)
ACC 111	Principles of Accounting II (3)
ACC 215	Managerial Accounting (3)
BUS 130	Introduction to Business and Management (3)
BUS 210	Business Law & Ethnics (3)
BUS 330	Marketing (3)
BUS 340	Finance (3)
BUS/PA/PSC345	Government & Business in Society (3)
BUS 350	Production Management (3)
BUS 490	Business Policy (3)
CIS 105	Programs & Information Processing (3)
CIS 480	Operations Research (3)
SOC 301	Organizational Behavior (3)
MAJOR/RELATED ELECTIVES (12 SH) by advisement	

Prerequisites/Related Requirements: In addition the following courses are required by the major in the General Education Program:

ECO 101	American Economics:Macro (3)
ECO 102	American Economics:Micro (3)
MA 105	Introductory Statistics (3)
MA 109	Finite Math (3)
MA 111	Fundamentals of Calculus (3)
SOC 101	Introduction to Sociology (3)

Student internships are available to students with local businesses and/or governmental agencies.

Chemistry

PROGRAM: Chemistry

DEGREE: Bachelor of Science

DEPARTMENT: Chemistry

Some Career Opportunities: Prepares the student for a career in industry as a professional chemist. Other career options include: biochemist, chemical processor, nutritionist, science editor, environmentalist, food and sanitary inspector, hospital administrator, laboratory assistant, medical illustrator, medical librarian, science librarian, medical technologist, public health educator, technical writer, epidemiologist, toxicologist, pharmacologist, chemical sales person, public health employee, science/research firm administrator, and food scientist. The B.S. degree also can prepare the student for graduate work in chemistry, chemical engineering, dentistry, pharmacy, medicine, optometry, physiology, and college teaching.

Core Program Requirements:

CHM 112	General Chemistry II (4)
CHM 211	Organic Chemistry I (4)
CHM 212	Organic Chemistry II (4)
CHM 311	Quantitative Analysis (4)
CHM 321	Physical Chemistry I (4)
CHM 322	Physical Chemistry II (4)
CHM 332	Instrumental Analysis (3)
CHM 410	Seminar (1)
CHM 410	Seminar (1)
CHM 420	Qualitative Organic Analysis (3)
CHM 431	Advanced Inorganic Chemistry (4)
MA 240	Analytic Geometry and Calculus III (3)

CHEMISTRY ELECTIVES - Two courses for variable credit not including CHM 490 or CHM 497

Prerequisites/Related Requirements: We recommend that students wishing to major in this program have acquired a working knowledge of high school algebra, geometry, and trigonometry.

In addition the following courses are required by the major in the General Education Program:

CHM 111	General Chemistry I (4)
MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
MA Elective	(3)
PHY 188	General Physics I (4)
PHY 211	General Physics II (4)

It is expected that students will devote twelve (12) semester hours of their elective credits to math and science courses other than those listed above.

Clothing and Textiles

PROGRAM: Clothing and Textiles

DEGREE: Bachelor of Science

DEPARTMENT: Home Economics

Some Career Opportunities: Fashion buyer, fashion merchandiser, retail management positions, sales representative apparel or textile firms, apparel production manager, promotion, publicity, display of fashion, home sewing industry representative and extension clothing specialist.

Core Program Requirements:

BUS 130	Introduction to Business & Management (3)
ED 302	Instructional Technology (2)
HEC 100	Home Economics Orientation (1)
HEC 101	Clothing & Man (3)
HEC 102	Fundamentals of Fashion (2)
HEC 111	Introduction to Nutrition (3)
HEC 121	Personal & Family Management (2)
HEC 131	Introduction to Child and Family (2)
HEC 201	Fundamentals of Clothing Construction (3)
HEC 210	Social Usage (1)
HEC 302	Apparel Design Analysis (3)
HEC 303	Tailoring (3)
HEC 304	Clothing Production, Distribution & Consumption (3)
HEC 305	Structure & Properties of Fibers (2)
HEC 321	Consumer Economics (3)
HEC 323	Interior Environment (3)
HEC 403	Flat Pattern Design (3)
HEC 404	Creative Draping (3)
HEC 405	Fabrics & Finishes (3)
HEC 409	Field Experience and Seminar in Clothing (4)
HEC 416	Presentation Techniques (2)
HEC	Elective (3)

Prerequisites/Related Requirements: Background courses in liberal arts and business. Students are required to complete a 6-week internship in a fashion-related business and a 1-week New York City tour of the fashion industry.

Within the program there are fifteen credits of electives which permit the student to tailor a program to his/her career choice.

In addition the following courses are required by the major in the General Education Program:

ART 241	Color & Design (3)
BIO 101	Man and the Biological World (4)
CHM 101	Introductory Chemistry (4)
CHM 102	Organic and Biochemistry (4)
ECO 101	American Economics:Macro (3)
MA 105	Introduction to Statistics (3) or
MA 107	Introduction to Computer Programming (3) or *
ACC 110	Principles of Accounting I (3)
PSY 101	Introduction to General Psychology (3)
SOC 101	Introduction to Sociology (3)

Computer Science

PROGRAM: Computer and Information Sciences - Computer Science Emphasis

DEGREE: Bachelor of Science

DEPARTMENT: Computer Science

Some Career Opportunities: Computer programmer/analyst, computer systems analyst, computer scientist, computer software engineer, computer project leader, computer center manager, etc.

Core Program Courses:

CIS 104	Introduction to Computer Science (3)
CIS 105	Programming & Information Processing (3)
CIS 205	Introduction to File Processing (3)
CIS 230	Language & Structure of Computers (3)
CIS 301	Data Structures (3)
CIS 325	Operating & Programming Systems (3)
CIS 335	Assembly Language Programming (3)
CIS 430	Organization of Programming Language (3)
MA 240	Analytic Geometry & Calculus III (3)
MA 241	Analytic Geometry & Calculus IV (3)
MA 250	Applied Probability & Statistics (3)
MA 260	Discrete Structures (3)
MA 280	Linear Algebra & Matrix Theory (3)
MA 308	Operations Research (3)
MA 310	Numerical Analysis (3)

MAJOR/RELATED ELECTIVES - 12 SH (by advisement)

Prerequisites/Related Requirements: In addition the following courses are required by the major in the General Education Program:

ECO 101	American Economics: Macro (3)
ECO 102	American Economics: Micro (3)
MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
PHY 188	General Physics I (4)
PHY 211	General Physics II (4)

Student internships are available with local businesses and/or government agencies.

Criminal Justice Administration

PROGRAM: Criminal Justice Administration

DEGREE: Bachelor of Arts

DEPARTMENT: Sociology/Social Work/Criminal Justice Administration

Some Career Opportunities: There is a wide variety of employment possibilities at the local, state and federal levels of government. Some of the broader areas include: law enforcement, corrections, probation, parole, court management and administration, private and industrial security, juvenile detention and treatment centers, etc.

Core Program Courses:

CJA 100	Introduct to the Administration of Criminal Justice(3)
CJA 201	Introduction to Corrections (3)
CJA 202	Introduction to Law Enforcement (3)
CJA 295	Delinquency & the Criminal Justice System (3)
CJA 324	Administration of Justice (3)

CJA 326, 340, 359, or 453 (3)
CJA ELECTIVES - 21 SH by advisement

Prerequisites/Related Requirements: In addition the following courses are required by the major in the General Education Program:

ENG 213 or PHL 201	(3)
PSC 101 or 202	(3)
PSC 240	Public Administration (3)
PSY 101	Intro to General Psychology (3)
SOC 101	Introduction to Sociology (3)

Dietetics

PROGRAM: Food Service - Dietetics Emphasis
DEGREE: Bachelor of Science
DEPARTMENT: Home Economics
Some Career Opportunities: Clinical dietitian - member of the health care team in a hospital, nursing home or other health care facility; Community nutritionist - working with such agencies as health maintenance organizations, cooperative extension, health departments, schools, and day care centers; Consultant dietitian - to health care facilities, private clients and community agencies; Dietetic educator - conducting nutrition education programs for various populations (i.e. children, elderly, pregnant women); Food service manager - working in commercial or institutional food service in hospitals, schools, colleges, restaurants and research dietitian - working for food company, hospital medical research center, business organization, or consumer affairs firm.
Core Program Courses:

BIO 332	Physiology (4)
BIO 343	Food Microbiology (4)
BUS 130	Introduction to Business & Management (3)
CHM 201	Introduction Biochemistry (4)
ED/PSY 230	Educational Psychology (3)
ED 302	Instructional Technology (2)
HEC 100	Home Economics Orientation (1)
HEC 101	Clothing & Man (3)
HEC 111	Introduction to Nutrition (3)
HEC 121	Personal & Family Management (2)
HEC 131	Introduction to Child & Family (2)
HEC 215	Principles of Food (3)
HEC 216	Food for the Family (3)
HEC 232	The American Family (3)
HEC 315	Food Service Organization & Management (3)
HEC 321	Consumer Economics (3)
HEC 323	Interior Environment (3)
HEC 391	Teaching Home Economics I (3)
HEC 410	Diet Therapy (3)
HEC 411	Quantity Food Production (4)
HEC 412	Institutional Equipment (2)
HEC 417	Survey of Nutrition (3)
HEC 418	Advanced Foods (3)
HEC 419	Internship/Dietetics (3)

Prerequisites/Related Requirements: High school science courses are encouraged. Work experience in dietetics or a food related area is useful. Students are required to complete a 3 credit summer work experience after their junior year.

In addition the following courses are required by the major in the General Education Program:

BIO 101	Man & Biological World (4)
CHM 101	Introductory Chemistry (4)
CHM 102	Organic & Biochemistry (4)
ECO 101	American Economics: Macro (3), OR
ECO 102	American Economics: Micro (3)
MA 107	Introduction to Computer Programming (3)
MA 130	Algebra & Trigonometry (or proficiency score 36) (3)
PSY 101	Introduction to General Psychology (3)
SOC 101	Introduction to Sociology (3)

NOTE: This program is approved by the American Dietetics Association.

Earth and Space Science

PROGRAM: Earth and Space Science

DEGREE: Bachelor of Arts

DEPARTMENT: Physics

Some Career Opportunities: Civil service at the state or lesser levels; lab technician or field assistant for consulting firms; mining and petroleum companies; graduate school.

Core Program Courses:

CHM 112	General Chemistry II (4)
GEL 121	Physical Geology (3)
GEL 122	Historical Geology (3)

GEOLOGY ELECTIVES (21 SH) by advisement

Prerequisites/Related Requirements: In addition the following courses are required by the major in the General Education Program:

CHM 111	General Chemistry I (4)
MA	Elective (3)
MA 105	Introduction to Statistics (3)
MA 130	Algebra & Trigonometry (3) AND
MA 160	Programming for the Mathematical Science OR
MA 140	Analytic Geometry & Calculus I (3) AND
MA 141	Analytic Geometry & Calculus II (3)

Eight credits from the following:

PHY 151	Conceptual Physics I (4)
PHY 152	Conceptual Physics II (4)
PHY 188	General Physics I (4)
PHY 211	General Physics II (4)

English

PROGRAM: English

DEGREE: Bachelor of Arts

DEPARTMENT: English

Some Career Opportunities: Writing and editing journals and newsletters for business, non-profit organizations, local, state, or federal government agencies; book or magazine publishing; college teaching; preparation for careers in law, medicine, commerce, or federal service.

Core Program Courses:

ENG 333	Advanced Composition (3)
ENG 358	Shakespeare (3)
ENG 410	Senior Seminar: Cultural & Historical Contexts of Literature (3)
	American Survey (6)
	British Survey (9)

ENGLISH ELECTIVES (12) by advisement

Prerequisites/Related Requirements: All students majoring in this program are required to achieve second year proficiency in a foreign language.

Environmental Science - Biology

PROGRAM: Biology - Environmental Science Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Biology

Some Career Opportunities: designed to train biologists who are capable of looking at environmental problems in an interdisciplinary way. Beyond their normal major, course work will include training in specialized chemistry, geology and geography.

Core Program Courses:

BIO 111	Introduction Cell Biology (4)
BIO 210	Zoology (4)
BIO 310	Ecology (3)
BIO 362	Limnology (3)
BIO 404	Seminar (1)
BIO 465	Environmental Science Seminar (1)
CHM 211	Organic Chemistry I (4)
CHM 212	Organic Chemistry II (4)
PHY 191	Physics I (4)
PHY 192	Physics II (4)
Must take two of the courses listed below	
BIO 330	Plant Physiology(3), or
BIO 332	Physiology(4)
BIO 340	Genetics (3)
BIO 355	Microbiology (3)
BIOLOGY ELECTIVES 13 OR 14 SH	
Must take two of the courses listed below	
CHM 332	Instrumental Analysis (3)
GEG 312	Weather and Climate (3)
GEL 361	Sedimentation (3)
Must take two of the courses listed below	
CHM 311	Quantitative Analysis (3)
GEG 231	World of Maps & Mapping (3)
GEG 372	Aerial Photo Interpretation (3)
GEL 102	Environmental Geology (3)
GEL 121	Physical Geology (3)

Prerequisite/Related Requirements: In addition the following courses are required in the General Education Program:

BIO 220	Botany (4)
CHM 111	General Chemistry I (4)
CHM 112	General Chemistry II (4)
GEG 222	Environmental Land Use and Natural Resources (3)
MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
MA 105	Introduction to Statistics (3) AND
MA 107	Introduction to Computer Programming (3)

Environmental Science-Geography

PROGRAM: Geography - Environmental Science Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Geography & Geology

Some Career Opportunities: The program in Environmental Science is for those students interested in environmental issues. Both a general overview of the field as well as practical (marketable) skills are taught. With diligent study, students will be prepared for graduate school or for entry-level positions in government and industry. Specifically, the program is designed to expose students to a variety of disciplines, provide them with a valuable and rigorous learning experience, and increase their marketability.

Core Program Courses:

GEG 101	World Regional Geography (3)
GEG 102	Human Geography (3)
GEG 111	Physical Geography (3)
GEG 212	Introduction to Geographic Research (3)
GEG 260	Economic Geography (3)
Geography Electives (9)	

PROFESSIONAL SEQUENCE (28 SH)

BIO 362	Limnology (3)
GEG 222	Environmental Land Use & Natural Resources (3)
GEG 231	World of Maps and Mapping (3)
GEG 312	Weather and Climate (3)
GEG 321	Geomorphology (3)
GEG 372	Aerial Photo Interpretation (3)
GEG 465	Seminar in Environmental Science (1)
GEL 361	Sedimentation (3)
CHOICE OF TWO OF THE FOLLOWING	
BIO 240	Local Flora (3)
BIO 310	Ecology (3)
CHM 311	Quantitative Analysis (3)
CHM 332	Instrumental Analysis (3)
GEL 102	Environmental Geology (3)
GEL 121	Physical Geology (3)

Prerequisites/Related Requirements: Although there are no prerequisites or related requirements in this program, students are encouraged to select their General Education courses very carefully and to consider supporting their degree with course work in mathematics and the sciences.

Environmental Science-Geology (B.A.)

PROGRAM: Geology - Environmental Science Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Geography & Geology

Some Career Opportunities: This emphasis is designed to train geologists who are capable of looking at environmental problems in an interdisciplinary way. Beyond the normal major, course work will include training in specialized chemistry, biology and geography.

Core Program Courses:

CHM 112	General Chemistry II (4)
GEL 121	Physical Geology (3)
GEL 122	Historical Geology (3)
GEL 232	Mineralogy (3)
GEL 251	Paleontology (3)
GEL 351	Structural Geology (3)
GEL 352	Stratigraphy (3)
GEL 465	Environmental Science Seminar (1)
Summer Field Camp - (6 - 12)	
GEOLOGY ELECTIVES - (3) (excluding GEL 101)	
Must take three courses listed below	
BIO 362	Limnology (3)
CHM 332	Instrumental Analysis (3)
GEG 312	Weather and Climate (3)
GEL 361	Sedimentation (3)
Must take two of the courses listed below	
BIO 240	Local Flora (3)
BIO 310	Ecology (3)
CHM 311	Quantitative Analysis (3)
GEG 231	World of Maps & Mapping (3)
GEL 102	Environmental Geology (3)
GEL/GEG 321	Geomorphology (3)
GEL/GEG 372	Aerial Photo Interpretation (3)

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

CHM 111	General Chemistry I (4)
GEG 222	Environmental Land Use and Natural Resources (3)
MA 140	Analytical Geometry & Calculus I (3) AND
MA 141	Analytical Geometry & Calculus II (3) **OR**
MA 105	Introductory Statistics (3)
MA 130	Algebra and Trigonometry (3)
MA 160	Programming for the Mathematical Sciences (3) AND
MA Elective	

Environmental Science - Geology (B.S.)

PROGRAM: Geology - Environmental Science Emphasis

DEGREE: Bachelor of Science

DEPARTMENT: Geography & Geology

Some Career Opportunities: This emphasis is designed to train geologists who are capable of looking at environmental problems in an interdisciplinary way. Beyond the normal major, course work will include training in specialized chemistry, biology and geography.

Core Program Courses:

BIO 210	Zoology (4)
BIO 220	Botany (4)
CHM 112	General Chemistry II (4)
GEL 121	Physical Geology (3)
GEL 122	Historical Geology (3)
GEL 232	Mineralogy (3)
GEL 251	Paleontology (3)
GEL 351	Structural Geology (3)
GEL 352	Stratigraphy (3)
GEL 361	Sedimentation (3)
GEL 371	Petrology (3)
GEL 465	Environmental Science Seminar (1)

GEOLOGY ELECTIVES-(3)(excluding GEL 101)

Summer Field Camp (6-12)

BIO 362	Limnology (3)
CHM 332	Instrumental Analysis (3)
GEG 312	Weather & Climate (3)

Must take two courses listed below

BIO 240	Local Flora (3)
BIO 310	Ecology (3)
CHM 311	Quantitative Analysis (3)
GEG 231	World of Maps & Mapping (3)
GEG 321/GEL 321	Geomorphology (3)
GEG/GEL 372	Aerial Photo Interpretation (3)
GEL 102	Environmental Geology (3)

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

CHM 111	General Chemistry I (4)
MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
PHY 188	General Physics (4)
PHY 211	General Physics II (4)

Exceptional Persons

PROGRAM: Exceptional Persons

DEGREE: Bachelor of Science

DEPARTMENT: Special Education

Some Career Opportunities: Human service career workers; Group home direct care workers and managers; Child care/adult care workers in public and private residential facilities; Direct care workers in interim care facilities for the mentally retarded; Manager of special community programs for the handicapped; Mental health mental retardation work; Trainers and client supervisors in sheltered workshops; rehabilitation workers.

Core Program Courses:

SPE 100	Preprofessional Experience (3)
SPE 101	Exceptional Persons in Society (3)
SPE 201	Mentally/Physically Handicapped (3)
SPE 304	Practical Arts/Exceptional Persons (3)
SPE 310	Communication Disorders (3)
SPE 340	Education of the Emotionally Disturbed (3)
SPE 345	Behavior Modification (3)
SPE 355	Selected Topics (3)
SPE 375	Residential Facilities for Handicapped (3)
SPE 450	Internship (12)
SPE 476	Normalization & Community Relations (3)

Management Courses - 12 SH

HPE 340	Safety & First Aid (3)
HEC 336	Adulthood and Aging (3), OR
PSY 322	Gerontological Psychology (3)
PSY 311	Introduction to Small Group Processes (3)
SWK 451	Social Planning & Community Organization(3)

MAJOR/RELATED ELECTIVES - (12 SH) by advisement

Prerequisites/Related Requirements: A personal commitment to working with primarily adult and elderly handicapped is highly desirable.

In addition the following course is required by the major in the General Education Program:

PSY 101	Introduction to General Psychology (3)

Fish Culture

PROGRAM: Fish Culture

DEGREE: Associate of Science

DEPARTMENT: Biology

Some Career Opportunities: Fish culture graduates are placed at private fish farms producing food fish, bait fish, or ornamental fish and at state and federal hatcheries producing sport fish. Some graduates are employed at public and private agencies involved in fisheries biology, management and research.

Core Program Courses:

BFC 213	Fish Culture I (3)
BFC 214	Fish Culture II (3)
BFC 215	Fish Pathology (3)
BFC 217	Fish Management (3)
BFC 218	Literature, Review & Report (1)
BFC 404	Seminar (1)
BIO 340	Genetics (3)
BIO 355	Microbiology (3)
BIO 360	Ichthyology (3)
BIO 362	Limnology (3)
BIO 450	Internship (10)
BIO 460	Aquaculture Research (2)

Prerequisites/Related Requirements: Only applicants who have completed a college prep high school curriculum or with some college experience are admitted to the program.

In addition the following courses are required in the General Education Program:

BIO 210	Zoology (4)
BIO 220	Botany (4)
CHM 101	Introductory Chemistry (4)
CHM 102	Organic & Biochemistry (4)
COM 101	Oral Communication (3)
ENG 112	Composition I (3)
MA 105	Introductory Statistics (3)
MA	Elective (3)

Food Service Management

PROGRAM: Food Service: Food Service Management Emphasis

DEGREE: Bachelor of Science

DEPARTMENT: Home Economics

Some Career Opportunities: Food consultant, consumer specialist, food journalist, test kitchen home economist, consumer affairs representative, manager, food service business or restaurant, caterer and sales representative, food related business.

Core Program Courses:

ACC 110	Principles of Accounting I (3)
BUS 130	Introduction to Business & Management (3)
BUS 330	Marketing (3)
ED 302	Instructional Technology (2)
ED 420	Basic Photography (3)
HEC 100	Home Economics Orientation (1)
HEC 101	Clothing & Man (3)
HEC 111	Introduction to Nutrition (3)
HEC 121	Personal & Family Management (2)
HEC 131	Introduction to Child & Family (2)
HEC 215	Principles of Food (3)
HEC 216	Food for the Family (3)
HEC 314	Nutrition Throughout the Life Cycle (3)
HEC 315	Food Service Organization & Management (3)
HEC 321	Consumer Economics (3)
HEC 323	Interior Environment (3)
HEC 411	Quantity Food Production (4)
HEC 412	Institutional Equipment (2)
HEC 416	Presentation Techniques (2)
HEC 418	Advanced Foods (3)
HEC 421	Household Equipment & Home Management (3)
HEC 429	Internship/Food Service Management (3)
JN 100	Journalism (3)

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

BIO 101	Man & the Biological World (4)
CHM 101	Introductory Chemistry (4)
CHM 102	Organic & Biochemistry (4)
COM 201	Introduction to Mass Media (3)
ECO 101 or 102 (3)	
MA 107	Introduction to Computer Programming (3)
PSY 101	Introduction to General Psychology (3)
SOC 101	Introduction to Sociology (3)

French

PROGRAM: French

DEGREE: Bachelor of Arts

DEPARTMENT: Foreign Language

Some Career Opportunities: The bachelor's degree in French is offered to prepare students in the basic skills of listening comprehension, speaking, reading and writing. Job opportunities related this program are to be found in federal government agencies, the military services, private business, international business, travel and tourism, translations services and teaching. Additionally students may continue their education in graduate programs in the fields of foreign languages, linguistics, area studies, literature and comparative literature. These areas could lead to opportunities in teaching at the university level.

Core Program Courses:

FR 201	Intermediate French I (3)*
FR 202	Intermediate French II (3)*
FR 205	Pronunciation & Phonetics (1)
FR 300	Conversation and Civilization (3)
FR 320	Advanced French Structure (3)
FR 330	Survey of French Literature I (3)
FR 331	Survey of French Literature II (3)

FRENCH ELECTIVES (11)

*Qualified students may start at 300 level

Foreign study in lieu of a portion of the program is encouraged. (Students contemplating study abroad should consult the procedures available in the office of the Provost/Vice President for Academic Affairs.

Prerequisites/Related Requirements: Completion of FR 101, 102 (Introductory I, II) or equivalent preparation as evaluated by the department is the prerequisite for admission to FR 201. Completion of FR 202, or equivalent preparation, is the prerequisite for all courses numbered higher.

General Studies

PROGRAM: General Studies

DEGREE: Bachelor of Arts

The Bachelor of Arts; General Studies program allows students to design their own major program in close cooperation with a faculty advisor. The degree is offered in recognition of the fact that some students enter college with specific academic or career goals that might not be met through one of the existing programs at the university. The university also recognizes that certain students have attained a level of intellectual maturity that allows them to explore broader areas and prepare such a specialized program.

Students in the program must meet the university's requirements in General Education, as well as all other academic requirements. No major concentration is required, but no student shall take more than 21 semester hours in any single field of study (e.g. Chemistry). Semester hours beyond 21 shall require that the student declare a major in that department, unless there are special circumstances. Credits in excess of 21 will increase the minimum number required for graduation by the same amount.

All academic rules and regulations of the university shall apply to students in the General Studies program except those pertaining to a major.

General Studies students may design a course of study and submit the proposal to a committee of faculty who will approve the proposal. If accepted and completed, the designed program will appear on the evaluation record as a concentration. Brochures are available in the Office of the Provost/Vice President for Academic Affairs explaining the procedures to be followed for such proposals and should be obtained by students prior to writing their proposals.

Possible areas of concentration include advertising, pre-law, economics, management, pre-veterinary, international studies, creative arts, and many others.

Geography

PROGRAM: Geography

DEGREE: Bachelor of Arts

DEPARTMENT: Geography & Geology

Some Career Opportunities: The B.A. in Geography is intended to prepare students for graduate study or entrance into the varied fields of employment available to geographers in business and industry, government, planning, and teaching. The program, very importantly, provides 36 credits of general electives and ample opportunity for the student to develop a concentration in one or more of the various areas of geography which provide career opportunities.

Core Program Courses:

GEG 101	World Regional Geography (3)
GEG 102	Human Geography (3)
GEG 111	Physical Geography (3)
GEG 212	Introduction to Geographic Research (3)
GEG 260	Economic Geography (3)

Geography Requirements:

GEG 222	Environmental Land Use & Natural Resources(3)
GEG 230	Introduction to Cartography (4)
GEG 498	Senior Seminar (3)
GEOGRAPHY ELECTIVES (12 SH) 200 level or higher	

Prerequisites/Related Requirements: Although there are no prerequisites or related requirements in this program, students are encouraged to select their General Education courses very carefully and to consider supporting their degree with course work in mathematics and computer science.

Geology (B.A.)

PROGRAM: Geology

DEGREE: Bachelor of Arts

DEPARTMENT: Geography and Geology

Some Career Opportunities: Mining and petroleum companies, field geologist, research labs, consulting firms, engineering firms, and graduate school.

Core Program Courses:

GEL 121	Physical Geology (3)
GEL 122	Historical Geology (3)
GEL 232	Mineralogy (3)
GEL 251	Paleontology (3)
GEL 351	Structural Geology (3)
GEL 352	Stratigraphy (3)

GEOLOGY ELECTIVES - 9 SH (200 level and higher)
Summer Field Camp - (6 - 12)

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

CHM 111	General Chemistry I (4)
MA	Elective (3)
MA 105	Introductory Statistics (3)
MA 130	Algebra & Trigonometry (3) AND
MA 160	Program Math Science (3) (OR)
MA 140	Analytic Geometry & Calculus I (3) (AND)
MA 141	Analytic Geometry & Calculus II (3)

Sciences (12 SH by advisement from CHM 112, PHY 188, 211 or BIO 210, 220)

Geology (B.S.)

PROGRAM: Geology

DEGREE: Bachelor of Science

DEPARTMENT: Geography and Geology

Some Career Opportunities: Mining and petroleum companies, field geologist, research labs, consulting firms, engineering firms and graduate school.

Core Program Courses:

BIO 210	Zoology (4)
BIO 220	Botany (4)
CHM 112	General Chemistry II (4)
GEL 121	Physical Geology (3)
GEL 122	Historical Geology (3)
GEL 232	Mineralogy (3)
GEL 251	Paleontology (3)
GEL 351	Structural Geology (3)
GEL 352	Stratigraphy (3)
GEL 361	Sedimentation (3)
GEL 371	Petrology (3)

GEOLOGY ELECTIVES - 9 SH (200 level and higher)
Summer Field Camp 6 - 12

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

CHM 111	General Chemistry I (4)
MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
PHY 188	General Physics I (4)
PHY 211	General Physics II (4)

German

PROGRAM: German

DEGREE: Bachelor of Arts

DEPARTMENT: Foreign Languages

Some Career Opportunities: The bachelor's degree in German is offered to prepare students in the basic skills of listening comprehension, speaking, reading and writing. Job opportunities related to this program are to be found in federal government agencies, the military services, private business, international business, travel and tourism, translation services and teaching. Additionally students may continue their education in graduate programs in the fields of foreign languages, linguistics, area studies, literature and comparative literature. These areas could lead to opportunities in teaching at the university level.

Core Program Courses:

GER 201	Intermediate German (3)*
GER 202	Intermediate German II (3)*
GER 205	Pronunciation & Phonetics (1)
GER 300	Conversation & Civilization (3)
GER 320	Advanced German Structure (3)
GER 330	Survey of German Literature I (3)
GER 331	Survey German Literature II (3)

GERMAN ELECTIVES - 11 SH

*Qualified students may start at 300 level

Foreign study in lieu of a portion of the program is encouraged. (Students contemplating study abroad should consult the procedures available in the Office of the Provost/Vice President for Academic Affairs.)

History

PROGRAM: History

DEGREE: Bachelor of Arts

DEPARTMENT: History

Some Career Opportunities: Foreign service; book editing; museums; college teaching; government agencies, law school; (business and government); positions requiring research and writing skills.

Core Program Courses:

HST 101 or 102 Western Civilization (3)
HST 201 or 202 American History (3)
HST 300 Historiography (3)
HST 496 Seminar on Selected Topics (3)
Third World History (3)
Third World Anthropology, Geography, History or Political Science (3)
HISTORY ELECTIVES - 15 SH (300-400 level - no more than 12 SH in any one area)

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program.

Social Sciences - 12 SH required

Human Relations

PROGRAM: Psychology - Human Relations Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Psychology

Some Career Opportunities: Applied emphasis prepares students for employment in a variety of human-service settings including drug and alcohol abuse treatment centers, diagnostic services, mental health and mental retardation facilities, and the criminal justice system. Some students enter a range of related graduate programs in fields such as community mental health, special education, counseling and guidance, vocational rehabilitation, and other human services.

Core Program Courses:

PSY 101	Introduction General Psychology (3)
PSY 150	Introduction to Scientific Psychology (1)
PSY 200	Survey & Data Analysis (3)
PSY 201	Tests and Measurements (3)
PSY 290	Life Span Development (3)
PSY 291	Abnormal Psychology (3)
PSY 300	Helping Skills I (3)
PSY 301	Helping Skills II (3)
PSY 490	Senior Seminar (3)
PSY 495	Pre-professional Experience (6-15), or
PSY 497	Independent study (1-3)

Psychology Elective - 9 SH by advisement from the following courses:
PSY 210, 212, 310, 311, 312, 320, 321, 322, 323, 324, 410, 430, 462

Prerequisites/Related Requirements: Students are encouraged to meet with advisors to form concentrations or minors in related areas of interest. In addition the following course is required in the General Education Program:

MATH 105	Introductory Statistics (3)

Information Systems

PROGRAM: Computer and Information Sciences - Information Systems Emphasis

DEGREE: Bachelor of Science

DEPARTMENT: Computer Science

Some Career Opportunities: Computer programmer/analyst, computer systems analyst, computer marketing representative, computer project leader, computer center manager, etc.

Core Program Courses:

ACC 110	Principles of Accounting I (3)
ACC 111	Principles of Accounting II (3)
ACC 215	Managerial Accounting (3)
BUS 130	Introduction to Business & Management (3)
CIS 104	Introduction to Computer Science (3)
CIS 105	Programming & Information Processing (3)
CIS 205	Introduction to File Processing (3)
CIS/ACC 225	Automated Accounting System (3)
CIS 230	Language & Structure of Computers (3)
CIS 301	Data Structures (3)
CIS 310	Introduction to System Analysis (3)
CIS 325	Operating & Programming System (3)
CIS 401	Management Information System (3)
CIS 480	Operations Research (3)
SOC 301	Organizational Behavior (3)

MAJOR/RELATED ELECTIVES - 12 SH (by advisement)

Prerequisites/Related Requirements: In addition the following courses are required by the major in the General Education Program:

ECO 101	American Economics: Macro (3)
ECO 102	American Economics: Micro (3)
MA 105	Introduction to Statistics (3)
MA 109	Finite Mathematics (3)
MA 111	Fundamental Concepts of Calculus (3) OR
MA 140	Analytic Geometry & Calculus I (3)
PHL 230	Introduction to Logic (3)
SOC 101	Introduction to Sociology (3)

Student internships are available with local businesses and/or government agencies.

International Studies

PROGRAM: Political Science - Interdisciplinary International Studies Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Political Science and Economics

Some Career Opportunities: International Studies can serve as a solid preparation for careers in government, business, law, journalism, teaching and military services. It prepares students for informed and responsible citizenship in a world which is increasingly interdependent.

Core Program Courses:

ANH 301	World Cultures (3)
GEG 101	World Regional Geography (3)
HST 365	Europe in the 20th Century (3)
PSC 210	Contemporary Issues in World Affairs (3)
PSC 212	Intro to Comparative Government and Politics (3)
	Senior Seminar (3)

Electives (21) (Maximum 9 credits from one discipline)

Prerequisites/Related Requirements: Six credits from advanced French, German, or Spanish courses dealing with modern society, culture and civilization.

Journalism

PROGRAM: Mass Communications - Journalism Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Speech, Communications, and Theatre

Some Career Opportunities: Information management is a basic need of business and industry. The writing background this program provides is useful in any career field. Specifically this program provides career opportunities as information specialists, or technical writers for newspaper, commercial or in-house magazines and advertising agencies.

Core Program Courses:

COM 201	Introduction to Mass Media (3)
COM 400	Communication Theory (3)
JN 100	Journalism (3)
JN 200	Crisis Reporting (3)
JN 210	Media Design (3)
JN 310	Interpretative Journalism (3)
JN 320	Creative Journalism (3)
JN 330	Press Performance (3)

Prerequisites/Related Requirements: 30-33 SH of related electives (by advisement). English courses by advisement are specifically recommended.

Liberal Studies

PROGRAM: Liberal Studies

DEGREE: Associate of Arts

DEPARTMENT: Chemistry, English, Geography, Mathematics, Political Science, and Speech

Some Career Opportunities: Mansfield University offers an Associate of Arts program in Liberal Studies. Students may major in one of the following concentrations.

Chemistry	Mathematics
English	Political Science
Geography	Speech

The AA program provides essential training in English composition, computational skills, knowledge of the liberal arts, and the principles and practices of the specific concentration chosen. Just as importantly, the AA program will help develop transferable skills useful in a variety of jobs. These include communication skills, analytical know-how, decision-making skills, the ability to work with people, and the development of a greater appreciation of the arts.

If seeking a foundation for pursuing a baccalaureate degree later or if looking for personal enrichment, the AA degree may be the answer. Associate degree students have the same rights and privileges as baccalaureate students.

Core Program Courses: The Associate of Arts Program consists of two years of full-time study or longer if taken on a part-time basis.

The program consists of 64 credits as follows:

A. A minimum of 15 and a maximum of 18 credits in your area of concentration.

B. 11 to 14 credits of electives

Under General Education, you must take:

1. English Composition 112, Communication 101, and 2 credits in Health or Physical Education.

2. One course in Art, Music or Theatre.

3. One course in three of the following areas: Economics, Geography, Political Science, Psychology, Sociology/Anthropology.

4. Six to seven credits from the following: Astronomy, Biology, Chemistry, Geology, Physics and Mathematics. Three credits must be in Mathematics.

5. One course from three of the following areas: History, Languages, Literature, Philosophy.

Chemistry Concentration

Required courses:

CHM 111	General Chemistry I (4)
CHM 112	General Chemistry II (4)
CHM 211	Organic Chemistry I (4)
CHM 212	Organic Chemistry II (4)
CHM 311	Quantitative Analysis (4)
MA 130	Algebra and Trigonometry (3)

English Concentration

The area of concentration in English consists of 12 to 15 hours selected by advisement from any English or Journalism courses at the 100 or 200 level plus three additional hours at the 300 level, excluding ENG 313. An advisor will assist the student to create a coherent group of courses from offerings in language, writing, literature, and journalism.

Continued on p. 72

Geography Concentration

Required Courses:

GEG 101	World Regional Geography (3)
GEG 102	Human Geography (3)
GEG 111	Physical Geography (3)
GEG 222	Environmental Land Use and Natural Resources (3)
GEG 260	Economic Geography (3)
GEG 380	Geography of the U.S. and Canada (3)

Mathematics Concentration

Required courses:

MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
MA 160	Programming for the Mathematical Sciences (3)
MA 250	Applied Probability and Statistics (3)

Math Electives - 6SH (109 & Above)

Political Science Concentration

Required courses:

PSC 101	American Politics (3)
PSC 206	Policy Formation and Implementation (3)
PSC 210	Contemporary Issues in World Affairs OR
PSC 212	Intro to Comparative Government and Politics (3)
PSC 202	State and Local Politics OR
PSC 240	Public Administration (3)

Political Science Electives - 6SH (200 & above)

With consent of the Political Science department advisor, the student with a 2.0 grade point average in Political Science courses may select a 300 level course as one of those elective courses.

Speech Concentration

Required courses:

COM 200	Oral Interpretation (3)
COM 201	Introduction to Mass Media (3)
COM 203	Voice and Articulation (3)
COM 204	Public Speaking (3)
COM 210	Introduction to Public Speaking (3)

Communication Electives - 3SH (COM 207, 301, 302, 305, 308, 310, 325, or 330.)

Mathematics

PROGRAM: Mathematics

DEGREE: Bachelor of Arts

DEPARTMENT: Mathematics

Some Career Opportunities: Mathematics positions in business and industry which include computer programming, statistics, operations research, and mathematics of finance. The mathematics program prepares students for graduate work in mathematics and other career-related fields.

Core Program Courses:

MA 160	Programming for Math Science (3)
MA 240	Analytic Geometry & Calculus III (3)
MA 241	Analytic Geometry & Calculus IV (3)
MA 250	Applied Probability & Statistics (3)
MA 260	Discrete Structures (3)
MA 280	Linear Algebra & Matrix Theory (3)

MATHEMATICS ELECTIVES - 12 SH (304 & above)

*MATHEMATICS ELECTIVES - 6 SH (by advisement)

*Courses below 304 require written approval

Prerequisites/Related Requirements: If preparation in algebra and trigonometry is not adequate to permit the student to proceed immediately to MATH 140 Analytic Geometry and Calculus I, he/she must complete MATH 130 Algebra and Trigonometry. In addition the following courses are required in the General Education Program.

MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
PHY 188	General Physics I (4)
PHY 211	General Physics II (4)

Medical Technology

PROGRAM: Medical Technology

DEGREE: Bachelor of Science

DEPARTMENT: Biology

Some Career Opportunities: Working in hospital laboratories performing and developing testing procedures as required for proper medical diagnosis. Job opportunities are excellent.

Core Program Courses:

BIO 111	Introduction to Cell Biology (4)
BIO 332	Physiology (4)
BIO 340	Genetics (3)
BIO 355	Microbiology (3)
BIO 380	Immunology (3
BIO	Elective (1)
CHM 211	Organic Chemistry I (4)
CHM 212	Organic Chemistry II (4)
CHM 311	Quantitative Analysis (4)
PHY 191	Physics I (4)

CLINICAL EDUCATION (off campus) 32 SH

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

BIO 210	Zoology (4)
CHM 111	General Chemistry I (4)
CHM 112	General Chemistry II (4)
MA 140	Analytic Geometry & Calculus I (3)
MA	Elective (3)

The Medical Technology program provides the opportunity to prepare for a career in clinical laboratory science. Under this program the student completes three years of pre-professional study at Mansfield University and one year of clinical study at an approved hospital Medical Technology program. Under advisement the student earns a minimum of 96 credits during the three years at Mansfield. When the student has successfully met all General Education and pre-professional requirements at the University, he/she is eligible to apply as a candidate for admission to the professional or clinical year of study (50 weeks) at an approved hospital Medical Technology program. Upon acceptance by the hospital, the student completes the fourth year of training which includes Microscopy, Hematology, Immunology and Blood Bank for a total of 32 semester hours. When all phases of the program are completed (3 years pre-professional and 1 year of clinical) the student is awarded the degree Bachelor of Science. The student is then eligible for certification given by the Board of Registry of Medical Technologists and/or by the National Certification Agency for Medical Laboratory Personnel.

Military Science - Army ROTC

PROGRAM: Military Science

DEGREE: Not Applicable

DEPARTMENT: Military Science

Some Career Opportunities: Successful completion of the Army ROTC Program will result in receiving a commission as a Second Lieutenant in the United States Army, the Army National Guard, or the United States Army Reserve. One could pursue a military career which is a honorable and financially secure occupation or use the educational experience in leadership and management to pursue a career in business management. Employers value these leadership qualities and prefer them in people they hire. Experience has shown that the junior officer who enters the business world greatly out performs college graduates who lack the experience and training.

Core Program Courses:

MS 110	Introduction to Military Science I (1)
MS 120	Introduction to Military Science II (1)
MS 210	Applied Leadership and Management I (1)
MS 220	Applied Leadership and Management II (1)
MS 230	Army ROTC Basic Camp, Ft. Knox, KY (Can be taken between Sophomore and Junior year in lieu of MS 110, 120, 210, and 220) (4)
MS 310	Advanced Leadership and Management I (3)
MS 320	Advanced Leadership and Management II (3)
MS 330	ROTC Advanced Camp, Ft. Bragg, NC (3)
MS 410	The Military Justice Paradigm (3)
MS 420	Theory and Dynamics of the Military Team (3)

Prerequisites/Related Requirements: Student enrolled in Army ROTC must be full time student and working towards a Bachelor of Science or Bachelor of Arts degree in any one of the schools many programs. Student must successfully complete a four year program if he or she is to earn a commission.

Music

PROGRAM: Music

DEGREE: Bachelor of Arts

DEPARTMENT: Music

Some Career Opportunities: College/University teaching (after graduate work); teaching in private school; music library work (after additional training), other job opportunities similar to those of any student graduating with a bachelor of arts degree.

Core Program Courses:

MUS 111	Basic Music I (3)
MUS 112	Basic Music II (3)
MUS 122	Classic & Romantic Music (2)
MUS 123	Post Romantic & 20th Century (2)
MUS 213	Basic Music III (3)
MUS 214	Basic Music IV (3)
MUS 222	Medieval & Renaissance (2)
MUS 223	Baroque Music (2)

MUSIC ELECTIVES - (12)

APPLIED MUSIC - (14)

- Major - (8)
- Secondary - (2)
- Ensemble - (4)

Prerequisites/Related Requirements: See section on Special Admissions Requirements.

Music History/Literature

PROGRAM: Music-History/Literature Emphasis

DEGREE: Bachelor of Music

DEPARTMENT: Music

Some Career Opportunities: College/university teaching (after graduate study); teaching in private school; music criticism; with additional training music library work.

Core Program Courses:

MUS 111	Basic Music I (3)
MUS 112	Basic Music II (3)
MUS 122	Classic & Romantic Music (3)
MUS 123	Post Romantic & 20th Century (3)
MUS 131	Eurythmics I (1)
MUS 132	Eurythmics II (1)
MUS 213	Basic Music III (3)
MUS 214	Basic Music IV (3)
MUS 222	Medieval & Renaissance Music (3)
MUS 223	Baroque Music (3)
MUS 316	Counterpoint (3)

HISTORY, LITERATURE & THEORY ELECTIVES - (9)
MUSIC ELECTIVES - (5)
APPLIED MUSIC - (40)
- Major - (24)
- Secondary - (8)
- Ensemble - (8)

See section on Special Admissions Requirements.

Music in Performance-Instrumental

PROGRAM: Music in Performance - Instrumental emphasis

DEGREE: Bachelor of Music

DEPARTMENT: Music

Some Career Opportunities: Private studio teaching; college/university teaching (after graduate study); performance in orchestras, choruses, operas; directing orchestras, bands, choruses, operas graduate assistantships for continued study.

Core Program Courses:

MUS 111	Basic Music I (3)
MUS 112	Basic Music II (3)
MUS 122	Classic & Romantic Music (3)
MUS 123	Post Romantic & 20th Century (3)
MUS 131	Eurythmics I (1)
MUS 132	Eurythmics II (1)
MUS 213	Basic Music III (3)
MUS 214	Basic Music IV (3)
MUS 222	Medieval & Renaissance Music (3)
MUS 223	Baroque Music (3)

HISTORY, LITERATURE & THEORY ELECTIVES - (10)
MUSIC ELECTIVES - (9)
APPLIED MUSIC - (48)
- Major - (32)
- Secondary - (8)
- Ensembles - (8)

See section on Special Music Admission Requirements.

Music in Performance -Keyboard

PROGRAM: Music in Performance - Keyboard emphasis

DEGREE: Bachelor of Music

DEPARTMENT: Music

Some Career Opportunities: Private studio teaching; college/university teaching (after graduate study); performance in orchestras, choruses, operas; directing orchestras, bands, choruses, operas; graduate assistantships for continued study.

Core Program Courses:

MUS 111	Basic Music I (3)
MUS 112	Basic Music II (3)
MUS 122	Classic & Romantic Music (3)
MUS 123	Post Romantic & 20th Century (3)
MUS 131	Eurythmics I (1)
MUS 132	Eurythmics II (1)
MUS 213	Basic Music III (3)
MUS 214	Basic Music IV (3)
MUS 222	Medieval & Renaissance Music (3)
MUS 223	Baroque Music (3)
MUS 321	Piano Literature I (2)
MUS 322	Piano Literature II (2)
MUS 484	Piano Pedagogy (2)

HISTORY, LITERATURE & THEORY ELECTIVES - (8)
MUSIC ELECTIVES - (7)
APPLIED MUSIC - (48)
- Major - (32)
- Secondary - (8)
- Ensembles - (8)

See section on Special Music Admission Requirements.

Music in Performance - Voice

PROGRAM: Music in Performance - Voice Emphasis

DEGREE: Bachelor of Music

DEPARTMENT: Music

Some Career Opportunities: Private studio teaching; college/university teaching (after graduate study); performance in orchestras, choruses, operas; directing orchestras, bands, choruses, operas; graduate assistantships for continued study.

Core Program Courses:

MUS 111	Basic Music I (3)
MUS 112	Basic Music II (3)
MUS 122	Classic & Romantic Music (3)
MUS 123	Post Romantic & 20th Century (3)
MUS 131	Eurythmics I (1)
MUS 132	Eurythmics II (1)
MUS 213	Basic Music III (3)
MUS 214	Basic Music IV (3)
MUS 222	Medieval & Renaissance Music (3)
MUS 223	Baroque Music (3)
MUS 487	Song Literature (3)

HISTORY, LITERATURE & THEORY ELECTIVES - (8)
MUSIC ELECTIVES - (8)
APPLIED MUSIC - (48)
- Major - (32)
- Secondary - (8)
- Ensembles - (8)

See section on Special Music Admission Requirements.

Music Merchandising

PROGRAM: Music Merchandising

DEGREE: Bachelor of Arts

DEPARTMENT: Music

Some Career Opportunities: Instrument sales, sheet music; management of music store; recording; arts management; instrument repair; entertainment manager; music engineer for stage productions; public relations for musical groups; manager for musical tours.

Core Program Courses:

ACC 110	Principles of Accounting I (3)
ACC 111	Principles of Accounting II (3)
ACC 215	Managerial Accounting (3)
BUS 130	Introduction to Business & Management (3)
BUS 210	Business Law & Ethics (3)
BUS 330	Marketing (3)
CIS 105	Programming and Information Processing (3)
MUS 112	Basic Music II (3)
MUS 122	Classical & Romantic Music (2)
MUS 383	Instrumental Music Public School (2)
MUS 488	Music Merchandising (3)
MUS HST	Elective
APPLIED MUSIC - (24)	
Major - (10)	
Secondary - (8)	
Ensemble - (6)	
MUS 489	Internship, or 12 SH of Electives (by advisement)

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

ECO 102	American Economics:Micro (3)
MUS 111	Basic Music I (3)
SOC 101	Introduction to Sociology (3)

See section on Special Admissions Requirements.

Music Theory-Composition

PROGRAM: Music-Theory-Composition Emphasis

DEGREE: Bachelor of Music

DEPARTMENT: Music

Some Career Opportunities: College/university teaching; teaching in private school; arranging; composition; graduate assistantship for continued study.

Core Program Courses:

MUS 111	Basic Music I (3)
MUS 112	Basic Music II (3)
MUS 122	Classic & Romantic Music (3)
MUS 123	Post Romantic & 20th Century (3)
MUS 131	Eurythmics I (1)
MUS 132	Eurythmics II (1)
MUS 213	Basic Music III (3)
MUS 214	Basic Music IV (3)
MUS 222	Medieval & Renaissance Music (3)
MUS 223	Baroque Music (3)
MUS 316	Counterpoint (3)

HISTORY, LITERATURE & THEORY ELECTIVES - (9)
MUSIC ELECTIVES - (5)
APPLIED MUSIC - (40)
- Major - (24)
- Secondary - (8)
- Ensembles - (8)

See section on special Music Admission Requirements.

Music Therapy

PROGRAM: Music Therapy

DEGREE: Bachelor of Music

DEPARTMENT: Music

Some Career Opportunities: Work in settings such as mental hospitals, geriatric centers, day care facilities, community health centers, special service agencies, and public or private schools. Some persons also choose to open private studios in music therapy.

Core Program Courses:

MTH 210	Practicum I (1)
MTH 211	Seminar I (1)
MTH 271	Therapy Orientation (3)
MTH 310	Practicum II (1)
MTH 311	Seminar II (2-3)
MTH 372	Psy/Soc Foundations Music I (2)
MTH 373	Psy/Soc Foundations Music II (2)
MTH 410	Practicum III (1-2)
MTH 411	Seminar III (2-4)
MTH 471	Influence of Music on Behavior (3)
MTH 472	Music in Therapy (3)
MTH 475	Internship (2)
MUS 111	Basic Music I (3)
MUS 112	Basic Music II (3)
MUS 122	Classical & Romantic Music (2)
MUS 123	Post Romantic & 20th Century Music (2)
MUS 131	Eurythmics I (1)
MUS 132	Eurythmics II (1)
MUS 213	Basic Music III (3)
MUS 214	Basic Music IV (3)
MUS 311	Orchestration (2)
MUS 331	Choral Conducting (2)

MUS History (2)
APPLIED MUSIC - (23)
  Major - (6-8)
  Secondary - (11-13)
  Ensemble - (4)
Major/Related Electives - (12)
  PSY (3)
  PSY (3)
  PSY 291 Abnormal Psychology (3)
  SPE 101 Exceptional Persons in Society

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

BIO 101	Man & Bio World (4)
PSY 101	Introduction to General Psychology (3)

SOC and/or ANH (6)

See section on Special Music Admissions Requirements.

Personnel Administration

PROGRAM: Psychology - Personnel Administration Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Psychology

Some Career Opportunities: Provides foundation skills for newly emerging and traditional roles in personnel administration and human resource management. Courses and a preprofessional practicum offer an introduction to modern human resource management in business, industry, and government agencies. Some students seek entry level positions in business, industry, or government, but others go on for advanced study in business or behavioral sciences.

Core Program Courses:

ACC 110	Principles of Accounting I (3)
BUS 130	Introduction to Business & Management (3)
BUS/PSC/PA 345	Government & Business in Society (3)
PSC 344	Personnel Management (3)
PSY 101	Introduction to General Psychology (3)
PSY 150	Introduction to Scientific Psychology (1)
PSY 200	Survey & Data Analysis (3)
PSY 201	Tests & Measurements (3)
PSY 311	Introduction Small Group Processes (3)
PSY 313	Psychology of Interviewing (3)
PSY 332	Psychology of Stress Management (2)
PSY 410	Industrial & Consumer Psychology (3)
PSY 462	Behavior Modification (3)
PSY 490	Senior Seminar (3)
PSY 495	Pre-professional Experience (6-15) or
PSY 497	Independent Study (1-3)
SOC 301	Organizational Behavior (3)

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

ECO 102	American Economics:Micro (3)
MA 105	Introductory Statistics (3)
SOC 101	Introduction to Sociology (3)

Philosophy

PROGRAM: Philosophy

DEGREE: Bachelor of Arts

DEPARTMENT: Philosophy

Some Career Opportunities: Philosophy provides an excellent foundation for pursuing further study in areas such as law and the ministry. Virtually every Master of Business Administration program admits students with the philosophy B.A. The degree also prepares students, of course, for doing graduate work in philosophy, and many of our students have done this successfully.

Core Program Courses:

PHL 201	Introduction to Philosophy (3)
PHL 230	Introduction to Logic (3)
PHL 420	Classical Greek Philosophy (3)
PHL 422	Foundations Modern Philosophy (3)
PHL 490	Seminar(3)

PHILOSOPHY ELECTIVES 18 SH(minimum 6 SH 300/400 level)

Prerequisites/Related Requirements: We recommend that philosophy majors obtain a solid background in the liberal arts areas, especially English, history and foreign languages. Students considering graduate school in philosophy should develop a reading proficiency in French and German.

Special Features: The program features individual attention, flexibility, and ample opportunity for the student to complete a second major along with philosophy. Students are give a solid grounding in the three most important areas of philosophy: The Greek Period, the seventeenth century, and the contemporary world. The department's emphasis is on contemporary philosophical issues, especially those involving ethics. The department works closely with graduating seniors to assist them in obtaining employment or admission to a graduate or professional school.

Physics

PROGRAM: Physics

DEGREE: Bachelor of Arts

DEPARTMENT: Physics

Some Career Opportunities: Energy (public utilities, manufacturing, research), environmental areas, technical sales, industry (computer, manufacturing, optics), research labs, engineering jobs.

Core Program Courses:

MA 160	Programming for the Mathematical Sciences (3)*
MA 240	Analytic Geometry & Calculus III (3)
MA 241	Analytic Geometry & Calculus IV (3)
MA 311	Differential Equations I (3)
PHY 211	General Physics II (4)
PHY 212	General Physics III (4)
PHY 311	Modern Physics I (3)
PHY 312	Modern Physics II (3)
PHY 315	Experimental Physics I (3)
PHY 316	Experimental Physics II (3)
PHYSICS ELECTIVES - 5 courses (300 & above)	

*or any upper division course

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
PHY 188	General Physics I (4)

Political Science

PROGRAM: Political Science

DEGREE: Bachelor of Arts

DEPARTMENT: Politics and Economics

Some Career Opportunities: The political science graduate may choose a career in public service in national, state, or local government; the program is an excellent preparation for law school, teaching, foreign service, public opinion research and journalism.

Core Program Courses:

PSC 101	American Politics (3)
PSC 206	Policy Formation & Implementation (3)
PSC 210	Contemporary Issues in World Affairs (3)
PSC 235	Introduction to Political Analysis (3)

AMERICAN (3)
INTERNATIONAL-COMPARATIVE (3)
PUBLIC ADMINISTRATION-PUBLIC AFFAIRS (3)
THEORY-ANALYSIS (3)
POLITICAL SCIENCE ELECTIVES (12)

Prerequisites/Related Requirements: Faculty will recommend courses according to individual student goals. The Department offers minors in Economics, International Studies and Public Administration.

Pre-Engineering

PROGRAM: Physics-Pre-Engineering emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Physics

Some Career Opportunities: The Pre-Engineering program is a cooperative program with another institutions's engineering school. A student entering the program majors in Physics and spends the first three years at Mansfield University then transfers to the cooperating institution for two more years of concentrated engineering study to satisfy the graduation requirements of both schools is necessary and gives the student a B.A. Physics degree from Mansfield and a B.S. Engineering degree from the cooperating institution.

Some of the many engineering fields available at cooperating institutions are aerospace, agriculture, ceramic, civil, chemical, electrical, environmental, geological, industrial, mechanical, metallurgical, mining, nuclear, petroleum and natural gas or engineering science.

Combining the liberal arts education from Mansfield and the technical training of the engineer provides employment in industry, consulting firms, civil service, sales and research labs to name a few areas.

For some engineering fields, the number of free elective courses the student has may be reduced because of taking required courses for the engineering field.

Core Program Courses: Three years at Mansfield University and two years at the cooperating institution. The following list of courses is required at Mansfield:

MA 160	Programming for Math Science (3)
MA 240	Analytic Geometry & Calculus III (3)
MA 241	Analytic Geometry & Calculus IV (3)
MA 280	Linear Algebra & Matrix Theory (3)
MA 311	Differential Equations I (3)
MA 312	Differential Equations II (3)
PHY 211	General Physics II (4)
PHY 212	General Physics III (4)
PHY 311	Modern Physics I (3)
PHY 312	Modern Physics II (3)
PHY 313	Physical Mechanics I (3)
PHY 315	Experimental Physics I (3)
PHY 316	Experimental Physics II (3)

SCIENCE ELECTIVES - Two or Three Courses (by advisement)

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

CHM 111	General Chemistry I (4)
CHM 112	General Chemistry II (4)
ECO 101	American Economics:Macro (3)
MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
PHY 188	General Physics I (4)

Close Group I and V. Must include two six credit sequences. WRITING, AND PHYSICAL GEOGRAPHY are **NOT** acceptable.

Psychology

PROGRAM: Psychology

DEGREE: Bachelor of Arts

DEPARTMENT: Psychology

Some Career Opportunities: Research emphasis provides preparation for master's or doctoral level study in psychology. People who complete a doctoral program may ultimately be involved in professional activities that include college teaching, research, or clinical practice, depending upon the graduate program selected. This program emphasizes the behavioral sciences as part of a broadly focused liberal arts curriculum.

Core Program Courses:

PSY 101	Introduction to General Psychology (3)
PSY 150	Introduction to Scientific Psychology (1)
PSY 200	Survey & Data Analysis (3)
PSY 250	Experimental Design I (4)
PSY 290	Life Span Development (3)
PSY 291	Abnormal Psychology (3)
PSY 350	Experimental I - Learning (3)
PSY 350L	Learning Lab (1)
PSY 351	Experimental II - Perceptual Processes (3)
PSY 351L	Perceptual Processes Lab (1)
PSY 490	Senior Seminar (3)
PSY 495, 496, OR 497	
PSYCHOLOGY/LAB ELECTIVES - 4 SH (Course MUST include a Lab from following:)	
PSY 460	Physiological Psychology (3)
PSY 460L	Physiological Psychology Lab (1)
PSY 461	Experimental Social Psychology (4)
PSY 462	Behavior Modification (3)
PSY 462L	Behavior Modification Lab (1)

Prerequisites/Related Requirements: In addition the following course is required in the General Education Program:

MA 105	Introductory Statistics (3)

Public Relations

PROGRAM: Mass Communications - Public Relations Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Speech, Communications, and Theatre

Some Career Opportunities: Public relations; advertising; sales in industry, education, or health agencies; speech writers, company representatives; graduate schools.

Core Program Courses:

COM 201	Introduction to Mass Media (3)
COM 203	Voice & Articulation (3)
COM 204	Public Speaking (3)
COM 210	Introduction Public Relations (3)
COM 310	Public Relations Workshop (3)
COM 400	Communication Theory (3)
COM 401	Persuasion (3)
JN 100	Journalism (3)
JN 210	Media Design (3)

Related Electives—30 SH (by advisement), Courses in Business, Journalism, and Broadcasting are specifically recommended.

Prerequisites/Related Requirements: Before taking the Public Relations Workshop it is recommended that students take JN 100 Journalism; JN 210 Media Design; and ED 420 Basic Photography and COM 210 Introduction Public Relations.

Regional Planning

PROGRAM: Geography - Regional Planning Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Geography and Geology

Some Career Opportunities: The emphasis program in Regional Planning is specifically designed to prepare graduates for a career in planning. Most planners today work for city, county or regional planning agencies, although many are also employed in public development corporations, river basin commissions, and state and federal agencies. In Pennsylvania, for instance the Departments of Transportation, Environmental Resources, and Community Affairs employ planners. In the private sector, planners also work for consulting firms or large corporations which manage or develop real estate, such as banks, industrial firms, and utility companies. Employment in the field has been good and should remain so in the future. According to the Department of Labor, for example, employment growth in urban and regional planning will be better than average through 1990.

Core Program Courses:

GEG 101	World Regional Geography (3)
GEG 102	Human Geography (3)
GEG 111	Physical Geography (3)
GEG 212	Introduction to Geographic Research (3)
GEG 260	Economic Geography (3)

Geography Requirements:

GEG 222	Environmental Land Use & Natural Resources(3)
GEG 230	Introduction to Cartography (4)
GEG 231	World of Maps and Mapping (3)
GEG 350	Urban Geography (3)
GEG 364	Techniques of Geographic Measurement (3)
GEG 372	Aerial Photo Interpretation (3)
GEG 430	Modern Cartographic Techniques (3)
PROFESSIONAL SEQUENCE (21 SH)	
RPL 102	Introduction to Regional Planning (3)
RPL 342	Land Use Policy (3)
RPL 494	Planning Seminar (3)
RPL 496	Planning Internship (12)

Prerequisites/Related Requirements: Although there are no prerequisites or related requirements in this program, students are encouraged to select their General Education courses very carefully and develop knowledge and competency in areas ancillar to planning.

Respiratory Therapy

PROGRAM: Respiratory Therapy

DEGREE: Associate in Science

DEPARTMENT: Biology

Some Career Opportunities: The Associate in Science Respiratory Therapy Program prepares the student primarily for employment as a respiratory therapist in hospitals, medical clinics, and physicians' offices. Employment opportunities for the experienced therapist are expanding in business, industry and education.

Core Program Courses:

RPH 205	Pulmonary Function Testing (3)
RTH 101	Respiratory Therapy I (3)
RTH 102	Respiratory Therapy II (4)
RTH 103	Respiratory Therapy III (4)
RTH 104	Respiratory Therapy IV (3)
RTH 107	Clinical Practicum I (1)
RTH 108	Clinical Practicum II (12)
RTH 109	Clinical Practicum III (2)
RTH 110	Clinical Practicum IV (3)
RTH 202	Physiology of Respiration (3)
RTH 204	Pharmacology (3)
RTH 206	Introduction to Disease (2)
RTH 207	Pulmonary Disease (1)

Prerequisites/Related Requirements: Extensive clinical experience at area hospitals is included in the program.

In addition the following courses are required in the General Education Program:

BRP 103	Human Anatomy (4)
BRP 104	Human Physiology (3)
BUS 230	Management Principles (3)
CHM 106	Chemistry for Allied Health Sciences (3)
CIS 101	Computers in Society (3)
COM 101	Oral Communication (3)
ENG 112	Composition I (3)
MA 125	Math for Allied Health Sciences (3)
PSY 101	Introduction to General Psychology (3)
SOC 101	Introduction to Sociology (3)

Social Work

PROGRAM: Social Work

DEGREE: Bachelor of Social Work

DEPARTMENT: Sociology/Social Work/Criminal Justice Administration

Some Career Opportunities: Social worker, caseworker, child care worker, resident manager in the fields of aging, child welfare, drug and alcohol treatment, mental health, mental retardation, public welfare and family services. Provides advance standing in many graduate schools of social work.

Core Program Courses:

HST/SWK 315	Evolution of Social Welfare in America (3)
SOC 121	Contemporary Social Problems (3)
SOC 232	American Family Systems (3)
SOC 301	Organizational Behavior (3)
SOC 307	Social Research I (3)
SOC 308	Social Research II (3)
SWK 200	Human Behavior & Social Environment (3)
SWK 241	Introduction to Social Work (3)
SWK 252	Field Placement I (3)
SWK 349	Social Work Techniques: Case Work (3)
SWK 350	Social Work Techniques: Group Work (3)
SWK 451	Social Planning & Community Organization (3)
SWK 452	Field Placement II (12)
SWK 453	Senior Seminar (3)

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

ANH 101	Cultural Anthropology (3)
BIO 101	Man & the Biological World (4)
PSY 101	Introduction to General Psychology (3)
SOC 101	Introduction to Sociology (3)

The Social Work Program prepares social work generalists for beginning social work practice. The program is accredited by the Council on Social Work Education at the baccalaureate degree level. The degree of Bachelor of Social Work is conferred.

Sociology/Anthropology

PROGRAM: Sociology/Anthropology

DEGREE: Bachelor of Arts

DEPARTMENT: Sociology/Social Work/Criminal Justice Administration

Some Career Opportunities: Provides an adequate basis for advanced schooling in law, ministry, journalism, sociology or anthropology leading to practice in specific professions or college teaching.

Core Program Courses:

ANH 304	Studies in Major Cultural Systems (3)
ANH 310	Anthropological Field Methods (3)
PSY 310	Social Psychology (3)
SOC 307	Social Research I (3)
SOC 308	Social Research II (3)
SA 410	Sociological/Anthropological Theory (3)
SA 412	Rural Field Study (3), or
SA 421	Urban Society (3)

ANH., SA, AND SOC ELECTIVES - (15)

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

ANH 101	Cultural Anthropology (3)
PSY 101	Introduction to General Psychology (3)
SOC 101	Introduction to Sociology (3)

Spanish

PROGRAM: Spanish

DEGREE: Bachelor of Arts

DEPARTMENT: Foreign Languages

Some Career Opportunities: The bachelor's degree in Spanish is offered to prepare students in the basic skills of listening comprehension, speaking, reading and writing. Job opportunities related to this program are to be found in federal government agencies, the military services, private business, international business, travel and tourism, translations services and teaching. Additionally students may continue their education in graduate programs in the fields of foreign languages, linguistics, area studies, literature and comparative literature. These areas could lead to opportunities in teaching at the university level.

Core Program Courses:

SPA 201	Intermediate Spanish I (3)*
SPA 202	Intermediate Spanish II (3)*
SPA 205	Pronunciation & Phonetics (1)
SPA 210	Spanish Conversation (3)
SPA 306	Culture and Civilization of Spain (3), or
SPA 307	Culture and Civilization of Latin America (3)
SPA 320	Advanced Spanish Structure (3)
SPA 330	Survey Spanish Literature I (3)
SPA 331	Survey Spanish Literature II (3)

SPANISH ELECTIVES - 8 SH

*Qualified students may start at 300 level

Foreign study can be taken in lieu of a portion of the program; it is encouraged. (Students contemplating study abroad should consult the procedures available in the Office of the Provost/Vice President for Academic Affairs).

Prerequisites/Related Requirements: Completion of SPA 101, 102 (Introductory I, II) or equivalent preparation as evaluated by the department is the prerequisite for admission to SPA 201. Completion of SPA 202, or equivalent preparation, is the prerequisite for all courses numbered higher.

Speech

PROGRAM: Speech

DEGREE: Bachelor of Arts

DEPARTMENT: Speech, Communications, and Theatre

Some Career Opportunities: Management training programs; sales; advertising; graduate school.

Core Program Courses:

COM 200	Oral Interpretation (3)
COM 203	Voice & Articulation (3)
COM 204	Public Speaking (3)
COM 207	Argumentation and Debate (3), or
COM 305	Discussion and Group Dynamics (3)
COM 400	Communication Theory (3)

Prerequisites/Related Requirements: Other courses will be determined through advising, based on student goals.

Teacher Preparation Programs

Teacher certification by the Commonwealth of Pennsylvania is provided at Mansfield University in those program areas described below. A Bachelor of Science in Education degree is awarded, with the exception of Home Economics which awards a Bachelor of Science, and Music, which awards a Bachelor of Music in Music Education. General Science is available as added certification only.

All of the teacher preparation programs include a professional sequence of courses, in addition to the General Education and major field courses. The programs are presented in alphabetical order. Those programs certified to teach in grades 7 through 12 are listed under Secondary Education.

Teacher Preparation Programs Art Education (K - 12)

PROGRAM: Art Education (K - 12)

DEGREE: Bachelor of Science in Education

DEPARTMENT: Art

Some Career Opportunities: Teaching K thru 12th grades, as well as working in museums, and galleries, lecturer, preparation for graduate school, private business, jewelry designers, art store operations, book illustrators, design illustrators, graphic designers, advertising designer, screen illustration, cartoonists, technical illustrators, medical illustrators, artist assistants, potters, art store owners, etc.

Core Program Courses:

ARH 225	History of Modern Art (3)
ARH	Elective (3)
ART 201	Painting (3)
ART 210	Drawing (3)
ART 231	Printmaking (3)
ART 251	Jewelry (3)
ART 261	Waterbase Media (3)
ART 271	Ceramics (3)
ART 281	Sculpture (3)
ART 295	Crafts (3)
ART 300	Visual Studies (3)
ART 345	Fibers (3)

ART ELECTIVES - (6)

Prerequisites/Related Requirements: The following Professional Education courses are required for certification:

ARE 288	Hist & Phil of Education & Art Education (3)
ARE 290	Art in Elementary Teaching (3)
ARE 292	Art in Secondary School (3)
ARE 294	Curriculum Development in Art Education (2)
ARE 400	Student Teaching (12)
ED/PSY 230	Educational Psychology (3)
ED 302	Instructional Technology (2)

In addition the student must also take the following courses as a part of the General Education Program:

ARH 102	Survey of Art (3)
ART 241	Color & Design (3)
PSY 101	Introduction to General Psychology (3)

Students are also required to present a portfolio during a personal interview with art faculty for admission into the program.

Teacher Preparation Programs Elementary Education (K - 6)

PROGRAM: Elementary Education

DEGREE: Bachelor of Science in Education

DEPARTMENT: Education

Some Career Opportunities: Teaching all subjects in the elementary school, kindergarten through grade six. In Pennsylvania, certification may be extended to grades seven and eight in schools designated as Middle Schools. Graduates with an Early Childhood Education emphasis may choose to work in pre^{5}school child care centers.

Core Program Courses:

ED/PSY 230	Educational Psychology (3)
ED 301	Evaluative Techniques (2)
ED 302	Instructional Technology (2)
ED 401	History & Philosophy of Education (3)
ELE 201	Pre-Professional Experience (1)
ELE 202	Pre-Professional Experience (2)
ELE 301	Observation & Participation (3)
ELE 350	Child Development (3)
ELE 383	Teaching Reading (3)
ELE 384	Teaching Mathematics (3)
ELE 386	Teaching Social Studies (3)
ELE 387	Teaching Science (3)
ELE 400	Student Teaching (12)
ELE 401	Seminar in Elementary Education (2)
ELE 403	Communication Skills Workshop (3)
ELE 425	Diagnostic & Remedial Reading (3)
SPE 360	Exceptional Children in Regular Classes (3)

AREAS OF CONCENTRATION - 15 SH (Art, Early Childhood, Education, Exceptional Children, English, Environmental Education, Foreign Language, Language Arts/Reading, Mathematics, Music, Science, Social Science, Speech & Theatre), Teaching Gifted and Talented.

Prerequisites/Related Requirements: In addition the following courses are required in the General Education Program:

GEG Elective (3)	
HST 201 or 202	American History (3)
Humanities (9 SH)	
Mathematics (2 courses)	
PSY 101	Introduction to General Psychology (3)
Sciences (9 SH with one lab required)	

Teacher Preparation Programs Foreign Language-French (K-12)

PROGRAM: French

DEGREE: Bachelor of Science in Education

DEPARTMENT: Foreign Languages

Some Career Opportunities: The B.S.E. degree program in French is offered primarily to prepare candidates for teacher certification (K-12) in the field of French. Job opportunities are to be found in teaching in public school systems in the areas of secondary, middle and elementary school foreign language assignments. The candidate is also qualified to teach in private schools. However, the candidate is not restricted to teaching, and can also find the opportunities open which are available to the B.A. degree candidate - translation, government service, graduate studies, military service, business, etc.

Core Program Courses:

FR 201	Intermediate French I (3)*
FR 202	Intermediate French II (3)*
FR 205	Pronunciation & Phonetics (1)
FR 300	Conversational French & Civilization (3)
FR 320	Advanced French Structure (3)
FR 330	Survey French Literature I (3)
FR 331	Survey French Literature II (3)
FRENCH ELECTIVES - (11)	

*Qualified students may start at the 300 level.

Prerequisites/Related Requirements: In addition to the Professional Education courses required for certification (listed under Secondary Education Professional Requirements) the student must also take the following course:

PSY 101	Introduction to General Psychology

Completion of French 101, 102 (Introductory I, II) or equivalent preparation as evaluated by the department is the prerequisite for admission to FR 201. Completion of FR 202, or equivalent preparation, is the prerequisite for all courses numbered higher.

Candidates for the B.S.E. degree will be required to successfully complete an exit examination in the foreign language. Such an examination currently requires a competency in listening comprehension, speaking, reading and writing in the foreign language. It is anticipated that, in the future, examinations in teaching methodology and in civilization may be likewise required.

Teacher Preparation Programs Foreign Language-German (K-12)

PROGRAM: German

DEGREE: Bachelor of Science in Education

DEPARTMENT: Foreign Languages

Some Career Opportunities: The B.S.E. degree program in German is offered primarily to prepare candidates for teacher certification (K - 12) in the field of German. Job opportunities are to be found in teaching in public school systems in the areas of secondary, middle and elementary foreign language assignments.

The candidate is also qualified to teach in private schools. However, the candidate is not restricted to teaching, and can also find the opportunities open which are available to the B.A. degree candidate-translation, government service, graduate studies, military service, business, etc.

Core Program Courses:

GER 201	Intermediate German I (3)*
GER 202	Intermediate German II (3)*
GER 205	Pronunciation & Phonetics (1)
GER 300	Conversational German & Civilization (3)
GER 320	Advanced German Structure (3)
GER 330	Survey German Literature I (3)
GER 331	Survey German Literature II (3)

GERMAN ELECTIVES - (11)

*Qualified students may start at the 300 level

Prerequisites/Related Requirements: In addition to the Professional Education courses required for certification (listed under Secondary Education Professional Requirements.) The student must also take the following course as a part of the General Education program:

PSY 101	Introduction to General Psychology (3)

Completion of GER 101, 102 (Introductory German I, II) or equivalent preparation as evaluated by the department is the prerequisite for admission to GER 201. Completion of GER 202 or equivalent preparation, is the prerequisites for all courses numbered higher.

Candidates for the B.S.E. degree will be required to successfully complete an exit examination in the foreign language. Such an examination currently requires a competency in listening comprehension, speaking, reading and writing in the foreign language. It is anticipated that, in the future, examinations in teaching methodology and in civilization may be likewise required.

Teacher Preparation Programs Foreign Language-Spanish (K-12)

PROGRAM: Spanish

DEGREE: Bachelor of Science in Education

DEPARTMENT: Foreign Languages

Some Career Opportunities: The B.S.E. degree program in Spanish is offered primarily to prepare candidates for teacher certification (K - 12) in the field of Spanish. Job opportunities are to be found in teaching in public schools systems in the areas of secondary, middle and elementary foreign language assignments.
The candidate is also qualified to teach in private schools.
However, the candidate is not restricted to teaching, and can also find the opportunities open which are available to the B.A. degree candidate-translation, government service, graduate studies, military service, business, etc.

Core Program Courses:

SPA 201	Intermediate Spanish I (3)*
SPA 202	Intermediate Spanish II (3)*
SPA 205	Pronunciation & Phonetics (1)
SPA 210	Spanish Conversation (3)
SPA 306	Culture and Civilization of Spain (3) OR
SPA 307	Culture and Civilization of Latin America (3)
SPA 320	Advanced Spanish Structure (3)
SPA 330	Survey Spanish Literature I (3)
SPA 331	Survey Spanish Literature II (3)

SPANISH ELECTIVES - (8)

*Qualified students may start at 300 level

Prerequisites/Related Requirement: In addition to the Professional Education courses required for certification (listed under SEcondary Education Professional Requirements) the student must also take the following courses as a part of the General Education program:

PSY 101	Introduction to General Psychology

Completion of Spanish 101, 102 (Introductory Spanish I, II) or equivalent preparation as evaluated by the department is the prerequisite for admission to SPA 201. Completion of SPA 202, or equivalent preparation, is the prerequisite for all courses numbered higher.

Candidates for the B.S.E. degree will be required to successfully complete an exit examination in the foreign language. Such an examination currently requires a competency in listening comprehension, speaking, reading and writing in the foreign language. It is anticipated that, in the future, examinations in teaching methodology and in civilization may be likewise required.

Teacher Preparation Programs Home Economics Education (K-12)

PROGRAM: Home Economics Education

DEGREE: Bachelor of Science

DEPARTMENT: Home Economics

Some Career Opportunities: Home economics teacher in consumer homemaking and vocational programs, nursery school through grade twelve. Adult education, cooperative extension, educational representative for major corporations, governmental, public and private agencies serving families and individuals.

Core Program Courses:

HEC 101	Clothing & Man (3)
HEC 111	Introduction to Nutrition (3)
HEC 121	Personal and Family Management (2)
HEC 131	Introduction to Child & Family (2)
HEC 201	Fundamentals of Clothing Construction (3)
HEC 215	Principles of Food (3)
HEC 216	Food for The Family (3)
HEC 231	The First Years of Childhood (3)
HEC 232	The American Family (3)
HEC 321	Consumer Economics (3)
HEC 323	Interior Environment (3)
HEC 421	Household Equipment & Home Management (3)
HOME ECONOMICS ELECTIVES - (3 SH)	

Prerequisites/Related Requirements: The following Professional Education courses are required for certification:

ED/PSY 230	Educational Psychology (3)
ED 302	Instructional Technology (2)
ED 401	History & Philosophy of Education (3)
HEC 100	Home Economics Orientation (1)
HEC 390	Observation & Participation (3)
HEC 391	Teaching Home Economics I (3)
HEC 392	Teaching Home Economics II (3)
HEC 400	Student Teaching (12)
HEC 494	Vocation & Career Education (3)

In addition the student must also take the following courses as a part of the General Education program:

BIO 101	Man and the Biological World (4)
CHM 101	Introductory Chemistry (4)
CHM 102	Organic & Biochemistry (4)
PSY 101	Introduction to General Psychology (3)

Teacher Preparation Programs Music Education (K-12)

PROGRAM: Music Education

DEGREE: Bachelor of Music in Music Education

DEPARTMENT: Music

Some Career Opportunities: Directing band, orchestra, or choir, teaching classroom music in public or private schools at elementary, junior or senior high level; private studio teaching; church choir directing; graduate assistantships for continued study.

Core Program Courses:

APM 113	Keyboard Skills I (1)
APM 114	Keyboard Skills II (1)
MUS 111	Basic Music I (3)
MUS 112	Basic Music II (3)
MUS 122	Classic & Romantic Music (2)
MUS 131	Eurythmics I (1)
MUS 132	Eurythmics II (1)
MUS 213	Basic Music III (3)
MUS 214	Basic Music IV (3)
MUS 311	Orchestration (2)
MUS 331	Choral Conducting (2)
MUS 332	Instrumental Conducting (2)

APPLIED MUSIC - (28)
- Major - (10)
- Secondary - (11)
- Ensemble - (7)

Prerequisites/Related Requirements: The following Professional Education courses are required for certification:

ED/PSY 230	Educational Psychology (3)
ED 302	Instructional Technology (2)
ED 401	History & Philosophy Education (3)
MUS 381	Music in Elementary School (2)
MUS 382	Music in Secondary School (2)
MUS 383	Instrumental Music Public School (2)
MUS 400	Student Teaching (12)

In addition the student must also take the following courses as a part of the General Education program:

MUS 123	Post Romantic & 20th Century (2)
MUS 222	Medieval & Renaissance Music (2)
MUS 223	Baroque Music (2)
PSY 101	Introduction to General Psychology (3)

Teacher Preparation Programs Secondary Education-Professional Requirements (7-12)

PROGRAM: Secondary Education

DEGREE: Bachelor of Science in Education

DEPARTMENT: Education

Some Career Opportunities: The program prepares men and women to teach specific subject areas in secondary schools (grades 7 through 12). In Pennsylvania certification may be extended to specific subject areas in grades five and six in schools designated as Middle Schools.

Core Program Courses: Students who are secondary education majors function under a system of dual advisement. Under this system, an advisor from the education department assists the student in satisfying the individual's certification, while an adviser from the student's chosen discipline guides him in his area of specialization. The area of specialization is designed to provide the students with depth and expertise in a specific subject area. The Secondary Education major must complete the following courses in Professional Education:

ED 111	Secondary Education Professional Experience Program I (1)
ED 211	Secondary Education Professional Experience Program II (1)
ED/PSY 230	Educational Psychology (3)
ED 300	Secondary School Methods (3)
ED 301	Evaluative Techniques (2)
ED 302	Instructional Techniques (2)
ED 310	Basic Reading Practices (3)
ED 311	Secondary Education Professional Experience Program III (1)
ED 401	History & Philosophy of Education (3)
ED 411	Secondary Education Professional Experience Program IV (1)
ED 400	Student Teaching

Prerequisites/Related Requirements: Students who plan to teach in the secondary schools should consult both the Secondary Education section of the catalog, as well as the section that describes requirements for the specific subject area: Biology, Chemistry, Speech Communication, Earth and Space Science, English, Mathematics, and Physics. Students who wish to pursue broader based programs such as Physics/Math or Social Studies Comprehensive should consult with the Chairperson of the Education Department.

Teacher Preparation Programs Secondary Education-Biology (7-12)

PROGRAM: Biology

DEGREE: Bachelor of Science in Education

DEPARTMENT: Biology

Some Career Opportunities: The Secondary Education (B.S.E.) Program prepares the student to enter the teaching profession with certification in both biology and general science.

Core Program Courses:

BIO 111	Introduction Cell Biology (4)
BIO 210	Zoology (4)
BIO 310	Ecology (3)
BIO 404	Seminar (1)
CHM 211	Organic Chemistry I (4)
CHM 212	Organic Chemistry II (4)
PHY 191	Physics I (4)
PHY 192	Physics II (4)
Must Take Two Courses Listed Below:	
BIO 330	Plant Physiology (3),or BIO 332 Physiology(4)
BIO 340	Genetics (3)
BIO 355	Microbiology (3)
BIOLOGY ELECTIVES - 1 OR 2 SH	

Prerequisites/Related Requirements: In addition to the Professional Education courses required for certification (listed under Secondary Education Professional Requirements) the student must also take the following courses as part of the General Education Program:

BIO 220	Botany (4)
CHM 111	General Chemistry I (4)
CHM 112	General Chemistry II (4)
MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3) OR
MA 105	Introduction to Statistics (3) AND
MA 107	Introduction to Computer Programming (3)
PSY 101	Introduction to General Psychology (3)

Teacher Preparation Programs Secondary Education-Chemistry (7-12)

PROGRAM: Chemistry

DEGREE: Bachelor of Science in Education

DEPARTMENT: Chemistry

Some Career Opportunities: Leads to certification as a qualified teacher of chemistry in secondary schools. In addition, the student receives a sufficiently extensive background to continue on to graduate school for further studies in chemistry. A student who completes the program will graduate with a provisional certificate to teach in the Commonwealth of Pennsylvania.

The current demand for high school teachers of chemistry, both nationwide and in Pennsylvania, is high and the future looks bright for qualified people. In addition, the B.S.E. is the traditional entry level degree for school administrative positions such as school counselors, principals, superintendents, and other educational specialists.

Core Program Courses:

CHM 112	General Chemistry II (4)
CHM 211	Organic Chemistry I (4)
CHM 212	Organic Chemistry II (4)
CHM 311	Quantitative Analysis (4)
CHM 321	Physical Chemistry I (4)
CHM 332	Instrumental Analysis (3)
CHM 410	Seminar (1)
CHM 410	Seminar (1)

CHEMISTRY ELECTIVES - 6-8 SH (322,341,352,420,421,431,432)

Prerequisites/Related Requirements: In addition to the Professional Education courses required for certification (listed under Secondary Education Professional Requirements) the student must also take the following courses as a part of the General Education program:

CHM 111	General Chemistry I (4)
MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3) OR
MA 105	Introduction to Statistics (3) (and)
MA 107	Introduction to Computer Programming (3)
PHY 188	General Physics I (4)
PHY 211	General Physics II (4)
PSY 101	Introduction to General Psychology (3)

Social Science Electives (3)

Teacher Preparation Programs Secondary Education- Earth and Space Science (7-12)

PROGRAM: Earth and Space Science

DEGREE: Bachelor of Science in Education

DEPARTMENT: Geography and Geology

Some Career Opportunities: High school teaching.

Core Program Courses:

AST 105	Solar System (3),or
AST 106	One Universe (3)
CHM 112	General Chemistry II (4)
GEG 312	Weather & Climate (3)
GEL 121	Physical Geology (3)
GEL 122	Historical Geology (3)
MAJOR/RELATED ELECTIVES - 15 SH	

Prerequisites/Related Requirements: In addition to the Professional Education courses required for certification (listed under Secondary Education Professional Requirements) the studen must also take the following courses as a part of the General Education program:

CHM 111	General Chemistry I (4)
Math Elective (3)	
MA 105	Introduction to Statistics (3)
MA 130	Algebra & Trigonometry (3)
MA 160	Program for Math Science (3) OR
MA 140	Analytic Geometry & Calculus I (3) AND
MA 141	Analytic Geometry & Calculus II (3)
PHY 151	Conceptual Physics I (4)
PHY 152	Conceptual Physics II (4)
PSY 101	Introduction General Psychology (3)

Teacher Preparation Programs Secondary Education-English (7-12)

PROGRAM: English

DEGREE: Bachelor of Science in Education

DEPARTMENT: English

Some Career Opportunities: This program leads to the Bachelor of Science in Education degree and to certification for teaching in the public schools.

Core Program Courses:

COM 400	Communication Theory (3)
ENG 225	English Grammar (3)
ENG 226	History of English Language (3)
ENG 301	Theory & Practice of Writing (3)
ENG 333	Advanced Composition (3)
ENG 358	Shakespeare (3)
ENG 410	Senior Seminar:Cultural & Historical Contexts of Literature (3)
AMERICAN SURVEY (6)	
BRITISH SURVEY (9)	
ENGLISH ELECTIVES (3) (by advisement)	

Prerequisites/Related Requirements: In addition to the Professional Education courses required for certification (listed under Secondary Education Professional Requirements) the student must also take the following courses as a part of the General Education program:

COM 200	Oral Interpretation (3)
PSY 101	Introduction to General Psychology (3)

Two year proficiency in a foreign language.

Teacher Preparation Programs Secondary Education-General Science (7-12)

PROGRAM: General Science

DEGREE: Teaching Certificate

DEPARTMENT: Education

Some Career Opportunities: General Science is available as a teaching certification field only. Students who have met all requirements for a degree in another field may add General Science as a teaching certificate as an original or added certification.

Core Program Courses:

Biology	6 - 8 credits
Chemistry	6 - 8 credits
Earth & Space Science	6 - 8 credits
Physics	6 - 8 credits
Electives	6 - 8 credits (by advisement)
Total	36 credits

Prerequisites/Related Requirements: In addition to the Professional Education courses required for certification (listed under Secondary Education Professional Requirements) the student must also take the following courses as a part of the General Education Program.

MA 130	Algebra & Trigonometry (3)
MA 140	Analytic Geometry & Calculus I (3) OR
MA 140 (3) and MA 141	Analytic Geometry & Calculus II(3)
PSY 101	Introduction to General Psychology (3)

Teacher Preparation Programs Secondary Education-Mathematics (7-12)

PROGRAM: Mathematics

DEGREE: Bachelor of Science in Education

DEPARTMENT: Mathematics

Some Career Opportunities: The mathematics department offers a sequence of courses leading to the B.S.E. degree for those students desiring to enter the teaching profession. The courses offered in the B.S.E. degree program are mathematically sophisticated and are also generally open to students pursuing the B.A. degree. These courses are designed to (1) provide preparation for teaching of all courses in the modern high school mathematics curriculum, (2) enable the student to develop basic understanding in many facets of mathematics, (3) provide adequate background in the "main stream" of contemporary mathematics so that the student can further explore areas of his own interest, and (4) provide the background necessary for the study of mathematics at the graduate level. In short, students who complete the teacher education major at Mansfield University are equipped to provide leadership in the teaching profession and to enjoy success in further study of mathematics in graduate schools commensurate with their abilities and interests.

Core Program Courses:

MA 160	Programming for the Mathematical Sciences (3)
MA 240	Analytic Geometry & Calculus III (3)
MA 241	Analytic Geometry & Calculus IV (3)
MA 250	Applied Probability & Statistics (3)
MA 260	Discrete Structures (3)
MA 280	Linear Algebra & Matrix Theory (3)
MA 304	History & Philosophy of Mathematics (3)
MA 329	Modern Geometry I (3)
MA 361	Modern Algebra I (3)

MATHEMATICS ELECTIVES - 3 SH (310 & above)

*MATHEMATICS ELECTIVES - 6 SH (by advisement)

*Courses below 310 require written approval

Prerequisites/Related Requirements: In addition to the Professional Education courses required for certification (listed under Secondary Education Professional Requirements) the student must also take the following courses as a part of the General Education program:

MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
PHY 188	General Physics I (4)
PHY 211	General Physics II (4)
PSY 101	Introduction to General Psychology (3)

Teacher Preparation Programs Secondary Education-Physics (7-12)

PROGRAM: Physics

DEGREE: Bachelor of Science in Education

DEPARTMENT: Physics

Some Career Opportunities: High school teaching

Core Program Courses:

MA 240	Analytic Geometry & Calculus III (3)
MA 241	Analytic Geometry & Calculus IV (3)
PHY 211	General Physics II (4)
PHY 212	General Physics III (4)
PHY 311	Modern Physics I (3)
PHY 315	Experimental Physics I (3)
PHY 316	Experimental Physics II (3)
One Physics Course (300-400 level)	

Prerequisites/Related Requirements: In addition to the Professional Education courses required for certification (listed under Secondary Education Professional Requirements) the student must also take the following courses as a part of the General Education program:

MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
PHY 188	General Physics I (4)
PSY 101	Introduction to General Psychology (3)

Teacher Preparation Programs Secondary Education-Physics/Math (7-12)

PROGRAM: Physics/Math

DEGREE: Bachelor of Science in Education

DEPARTMENT: Physics

Some Career Opportunities: High school teaching.

Core Program Courses:

MA 160	Programming for the Mathematical Sciences (3)
MA 240	Analytic Geometry & Calculus III (3)
MA 241	Analytical Geometry & Calculus IV (3)
MA 260	Discrete Structures (3)
MA 280	Linear Algebra & Matrix Theory (3)
MA 329	Modern Geometry I (3)
MA 361	Modern Algebra I (3)
PHY 211	General Physics II (4)
PHY 212	General Physics III (4)
PHY 311	Modern Physics I (3)
PHY 315	Experimental Physics I (3)
PHY 316	Experimental Physics II (3)

One Physics Course (300-400 level)

Prerequisites/Related Requirements: In addition to the Professional Education courses required for certification (listed under Secondary Education Professional Requirements) the student must also take the following courses as a part of the General Education program:

MA 140	Analytic Geometry & Calculus I (3)
MA 141	Analytic Geometry & Calculus II (3)
PHY 188	General Physics I (4)
PSY 101	Introduction to General Psychology (3)

Teacher Preparation Programs Secondary Education - Social Studies Comprehensive (7-12)

PROGRAM: Social Studies Comprehensive

DEGREE: Bachelor of Science in Education

DEPARTMENT: Education

Some Career Opportunities: This program provides an emphasis in geography, history, political science, psychology, or sociology/anthropology.

Core Program Courses: All emphases require the following courses:

ECO	Elective (3)
HST 101	Western Civilization I (3)
HST 102	Western Civilization II (3)
HST 201	America through Civil War (3)
HST 202	American Reconstruction to Present (3)

20th Century U.S. Studies OR SOC 101 (3)
Third World Area Studies - (6)
Major Area Electives-15 SH

Prerequisites/Related Requirements: In addition to the General Education requirements, (listed under Secondary Education Professional Requirements) the departments of geography & geology, history, politics & economics, psychology and sociology/social work & criminal justice should be consulted as to other prerequisites that may be required. See also the Professional Education courses required for certification.

Anthropology (3)
Geography (3)
Political Science (3)
PSY 101 Introduction to General Psychology (3)

Teacher Preparation Programs Special Education (K-12)

PROGRAM: Special Education

DEGREE: Bachelor of Science in Education
Certification: Mentally and Physically Handicapped (K-12)

DEPARTMENT: Special Education

Some Career Opportunities: Prepares teachers to work with the mentally and physically handicapped (M/PH) between grade levels K-12. Recent legislation has created opportunities to work with handicapped children age 0 to 5 and young adults, age 21 to 25.

Core Program Courses:

SPE 100	Pre-professional Experience (3)
SPE 101	Exceptional Persons in Society (3)
SPE 201	Mentally/Physically Handicapped (3)
SPE 301	Curriculum Development & Adjustment (3)
SPE 302	Diagnostic & Corrective Teaching (3)
SPE 303	Observation & Participation (3)
SPE 330	Cultural Diversity in Special Education (3)
SPE 340	Education of the Emotionally Disturbed (3)
SPE 345	Behavior Modification (3)
SPE 490	Learning Disabilities (3)

MAJOR/RELATED ELECTIVES - (7) (by advisement)

Prerequisites/Related Requirements: A personal commitment to working with mentally and physically handicapped children between the age of birth to 25 in public school or community based programs is highly desirable.

The following Professional Education courses are required for certification:

ED/PSY 230	Educational Psychology (3)
ED 301	Evaluative Techniques (2)
ED 302	Instructional Technology (2)
ED 401	History & Philosophy of Education (3)
ELE 350	Child Development (3)
ELE 383	Teaching Reading (3)
ELE 384	Teaching Mathematics (3)
SPE 400	Student Teaching (12)
SPE 410	Professional Seminar (3)

In addition the student must also take the following courses as a part of the General Education program:

Mathematics - one course (3)
PSY 101 Introduction to General Psychology (3)
Sciences - 2 courses (6-8)

Theatre (General)

PROGRAM: Theatre—General Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Speech, Communications, and Theatre

Some Career Opportunities: Acting, directing, management of professional, civic, summer dinner theatres; road companies, graduate school.

Core Program Courses:

COM 203	Voice & Articulation (3)
THT 210	Stagecraft (3)
THT 211	Theatre Production Workshop (1)
THT 211	Theatre Production Workshop (1)
THT 211	Theatre Production Workshop (1)
THT 212	Fundamentals of Acting I (3)
THT 214	Make-Up (1)
THT 215	Survey Theatre History I (3)
THT 216	Survey Theatre History II (3)
THT 310	Fundamentals of Directing (3)
THT 417	Play Structure & Analysis (3)

Prerequisites/Related Requirements: None

Theatre (Technical)

PROGRAM: Theatre - Technical Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Speech, Communications, and Theatre

Some Career Opportunities: Scenic design, lighting, costuming, make-up, properties for professional, civic, summer dinner theatres, road companies, musical and dance groups, graduate school.

Core Program Courses:

THT 210	Stagecraft (3)
THT 211	Theatre Production Workshop (1)
THT 211	Theatre Production Workshop (1)
THT 211	Theatre Production Workshop (1)
THT 212	Fundamentals of Acting I (3)
THT 214	Make-Up (1)
THT 215	Survey Theatre History I (3)
THT 216	Survey Theatre History II (3)
THT 310	Fundamentals of Directing (3)
THT 311	Stage Costuming (3)
THT 312	Stage Lighting (3)
THT 313	Scene Design (3)
THT 316	Theatre & State Management (3)
THT 450	Special Projects (1 - 3)

Choose one of the following groups -

I HEC 101 Home Economics Orientation (3), or
HEC 102 Clothing and Man (3)
HEC 201 Fundamentals Clothing Construction (3)

II THT 318 Advanced Lighting (2)
PHY 170 Intro Electronic Apparatus (3)

III THT 315 Scene Painting & Advanced Stagecraft (2)
THT 317 Drafting & Scenic Rendering (2)

Prerequisites/Related Requirements: In addition the student must also take the following courses as a part of the General Education program:

ARH 102	Survey of Art (3)
ART 241	Color & Design (3)

Theatre Arts Management

PROGRAM: Mass Communications - Theatre Arts Management Emphasis

DEGREE: Bachelor of Arts

DEPARTMENT: Speech, Communications and Theatre

Some Career Opportunities: The Theatre Arts Management program combines those skills necessary for employment in the field of Theatre Arts. It allows students to apply their interest in theatre, their communication skills, along with their management philosophies as leaders in a growing field.

Core Program Courses:

ACC 110	Principles of Accounting I (3)
ACC 111	Principles of Accounting II (3)
BUS 130	Intro to Business and Management (3)
BUS 330	Marketing (3)
COM 201	Introduction to Mass Media (3)
COM 203	Voice and Articulation (3)
COM 210	Introduction to Public Relations (3)
COM 320	Advanced Public Relations (3)
COM 400	Communication Theory (3)
JN 100	Journalism (3)
JN 210	Media Design (3)
THT 210	Stagecraft (3)
THT 316	Theatre and Stage Management (3)

Prerequisites/Related Requirements: Nine credits of major related electives at 300-400 level.

Travel and Tourism

PROGRAM: Business Administration: Travel and Tourism

DEGREE: Bachelor of Science

DEPARTMENT: Business Administration

Some Career Opportunities: The Travel and Tourism Program prepares graduates for a career in the travel and tourism professions. Graduates are equipped with a strong liberal arts education; a set of skills including computer, business skills, and a foreign language; and, a holistic understanding of the complex nature of travel and tourism. Upon graduation, students can expect to secure entry level positions that lead to responsible positions in a large variety of businesses including destination promotion, tour packaging, hotel and resort marketing and sales, domestic and foreign tour operations, and research development.

Core Program Courses:

TRT 102	Introduction to Travel & Tourism (3)
TRT 220	North American Destinations & Attractions (3)
TRT 221	Worldwide Destinations & Attractions (3)
TRT 222	Travel & Tourism Site Development (3)
TRT 300	Tourism Consumers (3)
TRT 312	International Tourism (3)
TRT 410	Topical Seminar (3)
TRT 430	Travel & Tourism Suppliers & Wholesalers (3)
TRT 460	Passenger Transportation (3)
TRT 480	Contemporary Issues in Travel & Tourism (3)

Prerequisites/Related Requirements:

ACC 110	Principles of Accounting I (3)
ACC 111	Principles of Accounting II (3)
BUS 160	Small Business Management (3)
BUS 210	Business Law & Ethics (3)
BUS 230	Management Principles (3)
BUS 330	Marketing (3)
BUS 362	Promotion in Marketing (3)
BUS 370	Salesmanship (3)
Fifth Semester Level Foreign Language Course (3)	
CIS 103	Introduction to Microcomputers (3)
MA 105	Introductory Statistics (3)

X-Ray Technology

PROGRAM: X-Ray Technology

DEGREE: Associate in Science

DEPARTMENT: Biology

Some Career Opportunities: The X-Ray Technology program is designed to provide the radiologic health team with a member who, under the direction of a radiologist, uses ionizing radiation as an investigative function which contributes to diagnosis of disease or injury.

The student will develop technical and social skills through active participation in an organized sequence of classroom, laboratory, and clinical experiences provided in the curriculum.

The student will perform the art and science of radiography with the skill and knowledge of total patient care and effective measures of radiation protection.

The technical ability of the radiographer will enable the health team to improve community health services and provide upward mobility for career development.

Core Program Courses:

XRT 101	X-Ray Technology I (3)
XRT 102	X-Ray Technology II (3)
XRT 103	X-Ray Technology III (5)
XRT 104	X-Ray Technology IV (3)
XRT 105	X-Ray Technology V (3)
XRT 106	X-Ray Technology VI (4)
XRT 203	X-Ray Physics (3)
XRT 301	Clinical Practicum I (2)
XRT 302	Clinical Practicum II (2)
XRT 303	Clinical Practicum III (2)
XRT 304	Clinical Practicum IV (3)
XRT 305	Clinical Practicum V (2)

Prerequisites/Related Requirements: Students should have a strong science background including high school physics. Students must complete the required number of clinical experience hours to be eligible to take the National Registry Examination for Radiology Technology.

In addition the following courses are required in the General Education Program:

BRP 103	Human Anatomy (4)
BRP 104	Human Physiology (3)
BUS 230	Management & Principles (3)
CIS 101	Computers in Society (3)
COM 101	Oral Communication (3)
ENG 112	Composition I (3)
MA 125	Math for Allied Health Sciences (3)
PHY 165	Physics for Allied Health Sciences (3)
PSY 101	Introduction to General Psychology (3)
SOC 101	Introduction to Sociology (3)
Free Electives (3)	

COURSE DESCRIPTIONS

ACCOUNTING (ACC)

110 PRINCIPLES OF ACCOUNTING I (3) Introductory course to develop understanding of debits and credits, basic balance sheet and profit/loss accounts, and accurate transaction recording.

111 PRINCIPLES OF ACCOUNTING II (3) Individual, partnership, corporate, non-profit entity accounting; stocks and bonds; statement of changes in financial position; income tax effects. Prerequisite: ACC 110.

215 MANAGERIAL ACCOUNTING (3) Management strategies to develop budgets and product costs and to control company costs and expenses. Prerequisite: ACC 111.

225 (CIS) AUTOMATED ACCOUNTING SYSTEMS (3) An introduction to the development and implementation of an accounting information system. A real commercial system will be analyzed and then used by students to process accounting case-studies. Prerequisites: ACC 215 and CIS 104 or CIS 105.

290 INTRODUCTION TO FEDERAL TAX ACCOUNTING (3) Practical application of the personal income tax law to the needs of the taxpayer as individual and business proprietor.

295 ADVANCED FEDERAL INCOME TAX (3) Advanced federal tax laws, partnership and corporation regulations. Tax planning and regulations. Tax planning and regulations research emphasized. Prerequisites: ACC 290, ACC 311.

310 INTERMEDIATE ACCOUNTING I (3) Intensive study of accounting principles and problems of fairly presenting financial position; measurement of assets, liabilities; preparation of financial statements. Prerequisite: ACC 111.

311 INTERMEDIATE ACCOUNTING II (3) Further study of generally accepted accounting principles; corporate earnings per share, tax allocation, pensions, leases, inflation. Prerequisite: ACC 310.

320 ADVANCED ACCOUNTING I (3) Partnerships, liquidations, corporate mergers, consolidated financial statements; non-profit entities, franchises. Prerequisite: ACC 311 or consent of instructor.

350 COST ACCOUNTING I (3) Budget planning product costing, costs control, break-even and variance analysis, management decisions. Prerequisite: ACC 111.

351 COST ACCOUNTING II (3) Capital budgeting, cost allocation, joint product costs, spoilage; inventory planning. Prerequisite: ACC 350 or consent of instructor.

400 AUDITING (3) Systematic process of objectively obtaining and evaluating evidence for the purpose of rendering an opinion and communicating the results to interested users. Prerequisite: ACC 320 or consent of instructor.

ANTHROPOLOGY (ANH)

101 CULTURAL ANTHROPOLOGY (3) Introduction to culture as a conceptional model and to the variations in behavior systems found among human societies. Cultural institutions are examined including the processes associated with their development and change.

102 HUMAN ORIGINS AND EVOLUTION (3) Study of the development of man with attention to human variation. Techniques involved in the discovery, reconstruction, and the classification of man are treated. Provides an introduction to physical anthropology including prehistoric archaeology.

301 WORLD CULTURES (3) Comparative study of selected major cultural areas of the world. Institutional patterns characterizing the cultural complexes of Europe and Southwest Asia, South Asia, Southeast Asia, North and South America and Africa south of the Sahara will be examined. Prerequisite: ANH 101 or permission of instructor.

304 STUDIES IN MAJOR CULTURAL SYSTEMS (3) Systematic examination of the cultural system of a major society. Dominant institutional norms, values, and modes of social organization are treated as parts of an integrated system. Course may be repeated for different cultural systems. Current cultural areas include North American Indians, Africa south of the Sahara, and Middle Eastern cultures. Prerequisite: ANH 101.

306 RURAL BELIEF SYSTEMS & LIFESTYLES (3) An investigation of rural values, beliefs, and attitudes and their relation to rural lifestyles. The emphasis is on the family farm and small city complex of appalachia and involves reading, research, and first hand experience. Prerequisite: ANH 101 or SOC 101.

310 ANTHROPOLOGICAL FIELD METHODS (3) Anthropological field methods examine qualitative field work methods of participation and unstructured interviews. The student is introduced to his/herself as actors in social situations, and analyzes campus life (small segments). Prerequisites: upper division status; ANH 101, SOC 101 and at least one other upper level anthropology or sociology course.

430 FIELD STUDY (2-8) Supervised field observation of selected aspect of human group activities in one cultural area. Study may be a broad survey of kinship, education, religion, work and governmental patterns of an intensive study of a single institution. Prerequisite: ANH 101 or SOC 101 and/or permission of instructor.

ART (ART)

201 PAINTING (3) Introduction to the methods, techniques and approaches of the painter. Emphasis is placed on composition, application and involvement in creative self-expression. Stress is placed upon the understanding and use of the media for solving various problems of representation. 1 Lect., 5 lab.

210 DRAWING (3) To build those skills and attitudes necessary for the remainder of the program. Introduction to the two and three dimensional aspects of drawing and develop personal power of expression. Stimulate creative thinking, develop a sensitivity to the art elements, sharpen impressions and the visual memory. 1 Lect., 5 Lab.

231 PRINTMAKING (3) Introduction to the printmaking processes of linocut, woodcut, lithography, serigraphy, etching, intaglio and drypoint with emphasis on their use for creative expression. 1 Lect., 5 Lab.

241 COLOR AND DESIGN (3) Introductory course to design. Emphasis is placed on the creative use of color and basic elements of design emphasizing their function and relationships through discussion and assigned problems. Introduction to types of harmony, sequence and balance while applying methods of design and representation through the use of various media. 1 Lect., 5 Lab.

251 JEWELRY (3) Study of two and three dimensional design concepts, with emphasis on individual solutions in the medium of metal. Both precious and common materials will be used. Traditional techniques of jewelry making will be explored. 1 Lect., 5 Lab.

261 WATERBASE MEDIA (3) Investigation into the waterbase media (transparent, gouache, acrylic polymer) with the intent of establishing a broad base of understanding needed to accomplish personal goals. 1 Lect., 5 Lab.

271 CERAMICS (3) Study of hand and wheel methods of forming. Introduction to the principles of glaze formulation; kiln stacking and firing. 1 Lect. 5 Lab.

281 SCULPTURE (3) Exploration of three dimensional design as related to sculpture. Basic techniques of stone and wood carving will be explored in addition to various methods of material build ups (wood, plaster, plexiglas, metal, etc.). 1 Lect., 5 Lab.

295 CRAFTS (3) Purpose is to become more receptive to three dimensional media and materials. Opportunity to explore various media, to develop an understanding of crafts. Basic design properties of wood, paper, clay, metal and plastics. 1 Lect., 5 Lab.

298 PUPPETRY (3) Devoted to the production and exploration of a variety of puppets, both traditional and contemporary. Concentration on creative imagery to develop characterization, special emphasis on the utilization of puppets; free play, impromptu, scripted productions, stage, special performances. 1 Lect., 5 Lab.

300 VISUAL STUDIES IN AESTHETIC EXPERIENCES (3) Philosophic theories of art, aesthetic experience, principles and criticism in the nature and comprehension of the character of arts; the artist and his relationship to life.

302 ADVANCED PAINTING (1-12) Direction of the course of study is determined by the student and instructor. Course may be taken for any number of semester hours not exceeding the total of 12. Prerequisite: ART 201.

311 ADVANCED DRAWING (1-12) Direction of the course of study is determined by the student and instructor. Course may be taken for any number of semester hours not exceeding the total of 12. Prerequisite: ART 210.

332 ADVANCED PRINTMAKING (1-12) Direction of the course of study is determined by the subject and instructor. Course may be taken for any number of semester hours not exceeding the total of 12. Prerequisite: ART 231.

342 ADVERTISING, DESIGN AND LETTERING (3) Introduction to advertising. Comprehensive survey of basic principles and practices in advertising their relation to economy, society, system of mass communication. Psychological and creative factors involved in advertising; design, research, media and campaign. 1 Lect., 5 Lab.

345 FIBERS (3) Creative application of the principles and elements of design and color theory to fibers and fabrics. Develop skills in textile techniques and understanding of the functional and aesthetic possibilities of fibers and fabrics. Techniques include: weaving, hooking, rya knotting, crochet, knitting, macrame, stitchery, tie dye, batik, block print, dye painting, spinning, quilting, basketry. 1 Lect., 5 Lab.

346 FIBERS WORKSHOP (3) Discuss and explore the principles of fabric construction as applied to practical uses, the functional and aesthetic uses of fibers, color and design in textiles and how to design specifically for textile techniques, sources for materials and equipment, including the building of simple equipment.

347 WEAVING & SPINNING (1-3) Exploration of spinning, weaving, the basic structure of fiber and fabric; starting with basic skill and advancing to drafting and weaving your own fabric. This will be a variable credit course taught with students individual projects.

352 ADVANCED JEWELRY (1-12) Direction of the course of study is determined by the student and instructor. Course may be taken for any number of semester hours not exceeding the total of 12. Prerequisite: ART 251.

362 ADVANCED WATERBASE MEDIA (1-12) Direction of the course of study is determined by the student and instructor. Course may be taken for any number of semester hours not exceeding the total of 12. Prerequisite: ART 261.

372 ADVANCED CERAMICS (1-12) Direction of the course of study is determined by the student and instructor. Course may be taken for any number of semester hours not exceeding the total of 12. Prerequisite: ART 271.

382 ADVANCED SCULPTURE (1-12) Direction of the course of study is determined by the student and instructor. Course may be taken for any number of semester hours not exceeding the total of 12. Prerequisite: ART 281.

396 ADVANCED CRAFTS (1-12) Direction of the course of study is determined by the student and instructor. Course may be taken for any number of semester hours not exceeding the total of 12. Prerequisite: ART 295.

403 SEMINAR (1) Will provide the art student with the opportunity to exchange ideas, to enhance critical dialectic, and to participate in activities relevant to the professional artist. The activities of the course will assist the student in developing his/her portfolio and exhibition skills.

404 SPECIAL PROBLEMS IN ART (1-6) Offered to those persons interested in extending their scope or gaining depth in specific academic areas related to art and/or education. Since needs and conditions change with each student, the requirements and restrictions are determined by the persons concerned by arrangement with the chairman.

445 ADVANCED FIBERS (1-12) Direction of the course of study is determined by the student and instructor. Course may be taken for any number of semester hours not exceeding the total of 12. Prerequisite: ART 345.

489 ART INTERNSHIP (3-12) A practical experience in a selected field of artistic endeavor designed to meet the students needs.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

498 ADVANCED PUPPETRY (1-6) Direction of the course of study is determined by the student and instructor. Course may be taken for any number of semester hours not exceeding the total of 6.

ART EDUCATION (ARE)

288 HISTORY AND PHILOSOPHY OF EDUCATION AND ART EDUCATION (3) The purpose of this course is to acquaint the student with social, historical and philosophical developments in education and art education.

290 ART EDUCATION IN ELEMENTARY TEACHING (3) Pre-student teaching experience in which each student prepares lessons and teaches children in the pre-school age through the fifth and sixth grades. Activities include field trips, observations and participation in nearby public schools. Program takes place on Saturday morning. 2 Lect., 4 Lab.

292 ART IN THE SECONDARY SCHOOL (3) Pre-student teaching situation based on classroom problems that occur in an actual teaching situation in the Mansfield Junior High School. Problems of an individual in the classroom provide a personalized approach to problems and their solutions. Emphasis is placed upon application, observation and evaluation of teaching as related to the adolescent in the junior high school. Prerequisite: ARE 290. 2 Lect., 4 Lab.

294 CURRICULUM DEVELOPMENT IN ART EDUCATION (2) Investigation of the concepts, attitudes, and values of art theory and practice as related to curriculum; a study of classroom problems and procedures in various teaching situations.

343 ARTS AND CRAFTS IN THE SPECIAL EDUCATION CURRICULUM (3) Creative work in a variety of activities with arts and crafts materials; particular emphasis on the needs of special education classes. 1 Lect., 3 Lab.

392 TEACHING ART IN THE ELEMENTARY GRADES (3) Philosophy and principles of art education in the elementary school curriculum; experience in the development of self expression through a variety of public school art materials and activities as a basis for understanding, evaluating children's art work. 1 Lect., 3 Lab.

400 STUDENT TEACHING (12) By arrangement. Opportunity to apply knowledge and skills acquired in professional preparation. Accomplished by a field experience in university/established centers under supervision of qualified cooperating teachers. Observations and conferences are scheduled by the departmental university supervisor. Required course for all Art Education majors seeking certification to teach.

444 ART AND RECREATION FOR THE HANDICAPPED CHILD (6) Three-week workshop with instruction in and practical application of art and recreation for the handicapped child in connection with the Easter Seal Society of Pennsylvania. First part on campus for several days in a classroom situation. Second part in an Easter Seal Society camp for the two week session, living, working, and playing with young handicapped children 24 hours a day under the direction and supervision of both camp and college professionals.

ART HISTORY (ARH)

101 INTRODUCTION TO ART (3) An approach to the dominant movements and ideas of the Western World as they evolved in visual arts, from the cave art origins to the 20th century systems.

102 SURVEY OF ART (3) Intercultural and interdisciplinary approach to dominant movements, ideas as they evolved in visual arts. Philosophic commonality of purpose which becomes intertwined with man's record of history.

220 PRIMITIVE ART (3) The study of prehistoric and primitive art from the Paleolithic period: Africa, Mexico, Europe, the Americas, Asia, Australia and the South Seas. Prerequisite: ARH 101 or 102.

221 ANCIENT AND MEDIEVAL ART (3) Comprehensive study of architecture, sculpture, painting and minor arts from the prehistoric through the Gothic period; emphasis on aesthetic values and historical implications, inconographic and symbolic significances. Prerequisite: ARH 101 or 102.

222 ART OF THE RENAISSANCE (3) Comprehensive study of architecture, sculpture, painting, in Italy, Flanders, Holland, Germany, England, France and Spain, with emphasis on the general characteristics of the Renaissance. Prerequisite: ARH 101 or 102.

225 HISTORY OF MODERN ART (3) Comprehensive study of the development of Modern Art from Nineteenth Century Neo-Classicism through Contemporary movements. Prerequisite: ARH 101 or 102.

226 ORIENTAL ART (3) Study of art in India, China and Japan in the areas of painting, sculpture, architecture, pottery and the minor arts. Trace influences central to the development and spread of important styles and the relationship of art to the classics of Oriental aesthetics.

227 HISTORY OF PRINTS (3) The study of the history of printmaking and the significant influences of the Eastern and Western cultures on the graphic processes. Prerequisite: ARH 101 or 102.

228 HISTORY OF ARCHITECTURE (3) Study of architecture, styles and methods of construction, from the earliest civilizations to the present. Analyze the outstanding contributions in architecture of the various cultures with emphasis on further development and influences, citing important examples and their architects. Prerequisites: ARH 101 or 102.

229 HISTORY OF BLACK AND AMERICAN INDIAN ART (3) Survey the art of Africa from the ancient kingdoms of Ife and Benin to Contemporary Africa. Impact of Black Art on European Art as developed through conscious use made of its idiom by early 20th Century European artists. Appraise the past and present performance of the Afro-American Artist and explain the Black artist's connection with African Art as "The Ancestral Arts".

230 HISTORY OF AMERICAN ART (3) Comprehensive study of the heritage of American art from the Limners and Artisans of colonial times through the 20th century in painting, architecture, and sculpture; emphasizing movements, trends and contributions by significant artists, architects, and sculptors. Prerequisites: ARH 101 or 102

401 CULTURAL ORIGINS OF THE WEST (6) Travel-study seminar abroad visiting countries in Western Europe. Intensive study of the humanities from which our culture springs; lectures conducted throughout the tour by the director, and finalized by the preparation of a term paper by the participants.

ASTRONOMY (AST)

105 THE EXPLORATION OF THE SOLAR SYSTEM (3) A descriptive astronomy course concerning contemporary astronomical and astrophysical theories about the solar system. 3 Lecture.

106 ONE POSSIBLE UNIVERSE (3) A descriptive astronomy course concerning contemporary astronomical and astrophysical theories about the universe. 3 Lecture.

108 OBSERVING THE AUTUMN SKY (1) This module concentrates on the constellations, stars, and other celestial objects found in the evening sky during autumn. Students also learn pertinent historical, legendary and astronomical facts about them.

109 OBSERVING THE WINTER SKY (1) This module concentrates upon the evening sky of winter. See AST 108 for course description.

110 OBSERVING THE SPRING SKY (1) This module concentrates upon the evening sky of spring. See AST 108 for course description.

111 OBSERVING THE SUMMER SKY (1) This module concentrates upon the evening sky of summer. See AST 108 for course description.

112 AEROSPACE (3) Relevance of space exploration to society will be integrated into course content. The laboratory will acquaint the student with Propulsion systems; problems of guidance, navigation, radiation, and aerodynamics; and the physiological and psychological reactions to space travel. 2 Lect., 2 Lab.

113 ORIGINS OF LIFE (1) The various mythological and scientifically-based theories about the origin of life are presented for critical study. The various experimental programs, currently underway, to attempt the generation of life, are discussed.

405 PLANETARIUM OPERATIONS (1) The primary aim of this course is to acquaint the participants with both the extent and limitations of the facility as an educational tool for school children as well as for the general public. Prerequisites: undergraduates-6 semester hours of astronomy or 3 semester hours and permission of instructor; graduates permission of instructor.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

BIOLOGY (BIO)

101 MAN AND THE BIOLOGICAL WORLD (4) An introduction to biological processes; study and discussion of these processes together with ecological aspects of life. The laboratory stresses demonstration and analysis of biological processes. 3 Lect., 2 Lab.

102 CONTEMPORARY BIOLOGICAL PROBLEMS (3) There is no fixed syllabus. Topics are current and usually changed for each semester. Guest lecturers will be given time to present their specialties. Prerequisite: BIO 101, 3 Lect.

111 INTRODUCTION TO CELL BIOLOGY (4) A study of the cellular level of life with emphasis on cellular structures and their relationship to movement, function and energy transformation. Cellular genetics and the cellular approach to medicine are also discussed. Designed for biology majors. 3 Lect., 3 Lab.

121 HUMAN ANATOMY AND PHYSIOLOGY I (4) This course presents an integrated approach to the study of the anatomy and physiology of the various organ systems of the human body. 3 Lect., 2 Lab.

122 HUMAN ANATOMY AND PHYSIOLOGY II (4) BIO 122 is a continuation of BIO 121. This course completes an integrated approach to the study of the anatomy and physiology of the various organ systems of the human body. 3 Lect., 2 Lab.

210 ZOOLOGY (4) An evolutionary approach to the study of the animal kingdom, with attention given to the development of organ systems throughout the several phyla of invertebrates and vertebrates. Function, correlated with structure and taxonomic features, is emphasized. Additional evidence for evolution is included through an introduction to genetics, embryology and ecology. 3 Lect., 2 Lab.

220 BOTANY (4) Study of plant structures and function, development, growth, diversity and evolution. Prerequisite: BIO 101 or 111. 3 Lect., 2 Lab.

222 HORTICULTURE (3) A course designed for the study of garden and interior plants. Lecture and laboratory sessions will provide information on soils, lighting, watering and other cultural requirements of plants as well as the methods and techniques for growing and maintaining indoor and outdoor plants.

230 FIELD ZOOLOGY (3) Taxonomy of local fauna; field collections and laboratory studies. Prerequisites: BIO 101, 111 or 210. 2 Lect., 3 Lab.

240 LOCAL FLORA (3) Taxonomic and ecological study of local flowering and non-flowering plants. Prerequisites: BIO 101 or 220. 2 Lect., 2 Lab.

250 MARINE BIOLOGY (3) Includes studies basic to the biology and ecology of marine organisms. Practical applications such as biological/ecological sampling techniques and species identification are covered in the laboratory and on a coastal field trip. Prerequisites: Permission of the instructor. BIO 310 recommended. 2 Lect., 2 Lab.

260 FIELD METHODS IN ENVIRONMENTAL BIOLOGY (3) A study of the field methods employed in measuring the biological qualities of the environment. Techniques applicable to surveys of the major aquatic and terrestrial habitats are taught through field experience. Analysis of data obtained and consideration of its significance is an integral part of the course.

Weekly schedule: 2 hours recitation and 12 hours lab. Prerequisite: Bio 101 or equivalent. BIO 310 recommended.

309 EPIDEMIOLOGY (3) The study of distribution and determinants of disease and injury in populations. This provides an introduction into community health and medical problems and services. Problem solving, case-control studies, and statistical analysis are emphasized. Prerequisite: permission of instructor. 2 Lect., 1 Recit.

310 ECOLOGY (3) A study of the fundamental ecological principles of plants and animals in their environment. Prerequisite: BIO 101 or permission of instructor. 2 Lect., 2 Lab.

320 ORNITHOLOGY (3) The biology of birds with emphasis on structure, behavior and taxonomy. Field trips for the study of local birds. Prerequisite: BIO 210 or permission of instructor. 2 Lect., 3 Lab.

325 ENTOMOLOGY (3) Survey of the classification, structure, physiology, biology and economic importance of insects. An introduction to the study of insects as a major segment of the biological community. Laboratory exercises on the anatomy and practice in the techniques of insect identification. Prerequisite: BIO 210 or permission of instructor. 2 Lect., 2 lab.

330 PLANT PHYSIOLOGY (3) A course designed to develop an understanding of the chemical and physical processes occurring in plants including respiration, photosynthesis, hormonal activity, osmosis, transpiration, mineral absorption and translocation. The laboratory work will involve analysis of these functions. Prerequisites: BIO 111 and 220, or permission of instructor. 2 Lect., 2 Lab.

331 VERTEBRATE ANATOMY (3) A history of vertebrates and comparative systems through the major vertebrate groups correlating their historical development. Prerequisite: BIO 101 or 111. 2 Lect., 4 Lab.

332 PHYSIOLOGY (4) A systematic study of the life processes and functions of the animal body with particular emphasis on the mammalian vertebrate. Prerequisite: BIO 101 or 111. 3 Lect., 2 Lab.

340 GENETICS (3) An introductory course with emphasis on basic principles and concepts of genetics concerning chromosomes, DNA, RNA, linkage, etc. An initial discussion will cover classical genetics followed by an in depth study of biochemical genetics. The laboratory section of this course will be used to demonstrate the aforementioned principles and concepts as well as acquaint the student with some of the organisms used in genetic research. Prerequisite: BIO 111 or permission of the instructor. 2 Lect., 3 Lab.

343 FOOD MICROBIOLOGY (4) Basic microbiology of bacteria, yeasts, and molds with emphasis as to preparation and preservation of foods, water and waste control, disease mechanisms, and special food products. This course is a required course for transcript evaluation prior to taking the registry exam by the American Dietetic Association. Prerequisite: At least junior standing in the Food Service Program of the home economics department. 3 Lect., 2 Lab.

345 DEVELOPMENTAL BIOLOGY (3) A comparative survey of the development of representative animals from several phyla with emphasis on gamete formation, fertilization, embryonic development, organogenesis, growth, and biological aging.

The laboratory combines examples of live plant and animal development with prepared slides of frog and check embryology. Prerequisites: BIO 111 and 210 or permission of instructor. 2 Lect., 3 Lab.

351 ANIMAL HISTOLOGY AND BASIC MICROTECHNIQUES (3) A systematic study of the microanatomy of the vertebrate body starting with cells and tissues and working through the complete organ systems. Prerequisite: BIO 101 or 111. 2 Lect., 2 Lab.

355 MICROBIOLOGY (3) An introductory course with an emphasis on the basic principles and concepts of microbiology concerning anatomy, classification, physiology and practical uses of micro-organisms. The laboratory section of this course will help the student develop aseptic technique. Prerequisite: BIO 111 or permission of instructor. 2 Lect., 3 Lab.

360 ICHTHYOLOGY (3) A laboratory and field study of the fishes inhabiting the lakes and rivers of this area constitute the major portion of this course. Collection, measurement and chemical data as related to fish populations, management, and meristic characters will be collected and analyzed. Prerequisites: BIO 210, 310, 331 or permission of instructor. 2 Lect., 2 Lab.

362 LIMNOLOGY (3) Deals with basic concepts in the study of inland waters. Focus on biological, chemical, physical, and geological factors which determine biological productivity in natural waters. Prerequisite: BIO 111 or permission of instructor. 2 Lect., 2 Lab.

375 PLANT MORPHOLOGY (3) Comparative study of vegetation and reproductive structures of the principal plan groups with the aim of understanding their possible relationships. Prerequisite: BIO 111 or 220 or permission of instructor. 2 Lect., 2 Lab.

380 IMMUNOLOGY (3) The study of antigens and antibodies encompassing the folds of the immune response, autoimmunity, allergic reactions, tumor immunology, tissue graft and transplant biology. 2 Lect., 2 Lab.

404 SEMINAR (1) Study and research projects involving investigation of recent literature in the field of biology; preparation of seminar papers on assigned problems. Senior biology majors only. 1 Recit.

444 MOLECULAR BIOLOGY (3) An examination of the principles and techniques underlying the chemical and physical aspects of living systems. A study of the structure and activities of biological molecules which, properly integrated, constitute all forms of life. The laboratories will demonstrate techniques of the activities, separation and analysis of these molecular forms. Prerequisite: BIO 111. 2 Lect., 2 Lab.

450 INTERNSHIP (1-12) The biology internship gives students the opportunity to apply knowledge and skills in the biological sciences while working with a public or private agency involved in aspects of applied biology. The practical experience thus acquired both supplements and reinforces the more academic aspects of biology stressed in the classroom.

460 AQUACULTURE RESEARCH (1-3) A special research project is initiated by the student to increase his/her expertise in investigating a scientific problem and reporting the results in the form of a scientific paper. The research is conducted under the guidance of a faculty member who has special expertise in the subject area. May be repeated for credit. Prerequisite: consent of instructor.

461 MANAGEMENT OF SMALL IMPOUNDMENTS (3) Theory, practice and demonstration of managing farm ponds for optimal sport fishing. Prerequisite: 6 semester hours of college biology and consent of instructor. May be taken for graduate or undergraduate credit.

462 MANAGEMENT OF STREAMS AND LARGE IMPOUNDMENTS (3) Theory, practice and demonstration of managing streams, rivers, natural lakes and large impoundments for optimal sport fishing. Prerequisites: 6 semester hours of college biology and consent of instructor. May be taken for graduate or undergraduate credit.

465 (GEG & GEL) SEMINAR IN ENVIRONMENTAL SCIENCE (1) An upperlevel seminar that integrates and applies concepts and skills taught in the basic courses of the Environmental Science emphasis.

482 CELL PHYSIOLOGY (3) A study of a specialized field of cell biology which emphasizes phenomena dealing with the nature of the cell membrane and its transport activities, the reaction of cells to changes in environment, the mechanism of cell excitability and contraction, and other manifestations of cellular functioning such as nutrition, growth and secretion. 3 Lect.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

BUSINESS ADMINISTRATION (BUS)

130 INTRODUCTION TO BUSINESS AND MANAGEMENT (3) Studies an overview of the broad concept of business functions. Provides a foundation for understanding the relationship between essential activities of business. Helps students to determine and pursue their areas of interest and aptitude.

160 SMALL BUSINESS MANAGEMENT (3) Emphasizes aspects of management unique to small firms. Examines the characteristics of entrepreneurs and the process of strategic planning for small firms.

210 BUSINESS LAW AND ETHICS (3) Introduces the legal environment of business and its role in modern society. Topics include the formation of contracts, sales, negotiable instruments, bank deposits and collections, secured transactions, and business organization. Emphasizes social and ethical considerations, terminology, fundamental legal principles and analysis.

230 MANAGEMENT PRINCIPLES (3) Acquaints the student with the functions and internal structure of modern business. Students will learn the techniques and systems employed by management to run an efficient organization.

330 MARKETING (3) Introduces the nature of marketing activities, consumer behavior and motivation. Focuses on an individual firm managing its marketing efforts in relation to market forces and marketing opportunities. Emphasis on development of product, price, promotion, and distribution policies in order to achieve planned marketing programs. Prerequisites: BUS 130, ECO 101 and 102.

333 (ECO) INTERNATIONAL FINANCIAL MANAGEMENT AND ECONOMICS (3) This course is designed to study the mechanism of international business finance. Topics covered include, the study of foreign exchange market, Eurodollar market, inflow and outflow of capital to and from the U.S., the effect of U.S. interest rate on imports and exports. Prerequisites:

ACC 111; ECO 101, 102 and MA 105.

340 FINANCE (3) Corporate finance deals with valuation of stocks and bonds, application of capital asset pricing models for valuing financial assets. Emphasis is placed on analysis of capital investment and financing decisions on corporate financial policy in the changing environment.

345 (PSC/PA) GOVERNMENT AND BUSINESS IN SOCIETY (3) Examines the idea of "social responsibility" of business. Examines the political and economic framework that affects legislation and business strategy. Considers the value judgments which influence policy makers.

350 PRODUCTION MANAGEMENT (3) This course is a study and use of analytical tools for demand forecasting, use of system design and measurement, inventory control and resource allocation. Specialized and analytical techniques are used to deal with practical situations.

370 SALESMANSHIP (3) Provides students with entry level skills for a position in sales. Recognizes the necessary skills and characteristics that contribute toward greater sales effectiveness. Stresses the importance of establishing realistic goals and objectives; to manage your time and selling activities more effectively. The primary objective, however, is to gain an understanding of personal selling as a major function within the marketing and promotional mix of a firm.

435 INVESTMENT THEORY (3) This course is about financial policy with special emphasis on the practical application of risk-return theory. Investment decisions by individuals and firms, in stocks and bonds and other securities, made on the basis of incomplete information in an uncertain environment is covered.

450 ORGANIZATIONAL INTERNSHIP (1-15) Supervised and evaluated participation in the regular activities of a business, government, agency, or appropriate organization. In consultation with the supervising faculty member, the student is expected to prepare a comprehensive final report relating to the work accomplished during the field experience.

490 BUSINESS POLICY (3) Studies business problems and the formulation of policies to meet these problems from a general management viewpoint. Integrates knowledge from other courses to develop skills in policy formulation. Emphasizes long range goals and administrative action. Case studies and simulation used. Prerequisites: Business major, senior standing.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

CHEMISTRY (CHM)

101 INTRODUCTORY CHEMISTRY (4) A treatment of fundamental principles for non-science majors. Does not meet the requirements for the degree programs in chemistry and biology. 3 Lect., 1 Recit., 2 Lab.

102 ORGANIC AND BIOCHEMISTRY (4) Principles of organic and biochemistry which are important and useful to non-science majors. Does not meet the requirements for the degree programs in chemistry and biology. 3 Lect., 1 Recit., 2 Lab. Prerequisite: CHM 101.

103 ENVIRONMENTAL CHEMISTRY (3) A non-laboratory course for non-science majors which deals with the chemical aspects of pollution, resource depletion, energy sources, drugs, chemical additives, etc.

106 CHEMISTRY FOR THE ALLIED HEALTH SCIENCES (3) A one semester survey course for non-science majors. General, organic, biochemistry and clinical chemistry are emphasized for students in health support programs. The course is usually taught at the Robert Packer Hospital.

111 GENERAL CHEMISTRY I (4) Designed for science majors, this course is a study of the fundamental principles of chemistry from the standpoint of stoichiometry, gases, states of mater, solutions and equilibrium theory. Laboratory sessions stress chemical principles discussed in the lecture. 3 Lect., 3 Lab.

112 GENERAL CHEMISTRY II (4) A continuation of CHM 111, kinetics, thermodynamics, oxidation-reduction, atomic and molecular structure, bonding and periodic relationships are studied. The laboratory work is an introduction to organic qualitative analysis and includes experiments designed to exemplify chemical principles. Laboratory sessions include one hour of lecture on theory and techniques of laboratory operations. Prerequisite: CHM 111. 3 Lect., 3 Lab.

201 INTRODUCTION TO BIOCHEMISTRY (4) A one semester course in elementary biochemistry for non-science majors having a minimum of preparation in organic chemistry. Prerequisite: CHM 102. 3 Lect., 2 Lab.

211 ORGANIC CHEMISTRY I (4) Fundamentals of organic chemistry are presented. Modern theory, reaction mechanisms and stereochemistry are included along with nomenclature, preparations, reactions and properties of organic compounds. The laboratory stresses synthesis, chemical and physical properties and an introduction to instrumental techniques. The laboratory period includes one hour of lecture on theory and techniques of laboratory operations. Prerequisite: CHM 112. 3 Lect., 4 Lab.

212 ORGANIC CHEMISTRY II (4) A continuation of CHM 211. The laboratory period includes one hour of lecture on theory and techniques of laboratory operations. Prerequisite: CHM 211. 3 Lect., 4 Lab.

311 QUANTITATIVE ANALYSIS (4) An introductory course in analytical chemistry emphasizing classical titrimetric and gravimetric methods and related theories. Prerequisite: CHM 112. 3 Lect., 4 Lab.

321 PHYSICAL CHEMISTRY I (4) A study of the fundamental principles of thermodynamics of gases and non-electrolytes. Topics include kinetic theory, gases, thermodynamic and nonelectrolyte solutions. Prerequisites: CHM 112 and 311, MA 240, PHY 188 and 211. 3 Lect., 4 Lab.

322 PHYSICAL CHEMISTRY II (4) A continuation of CHM 321. Topics include: thermodynamics of electrolytes, atomic and molecular structure and chemical kinetics. Prerequisite: CHM 321. 3 Lect., 4 Lab.

332 INSTRUMENTAL ANALYSIS (3) Principles and applications of instrumental methods in chemical and structural analysis.

Studies include electroanalytical, spectrophotometric and chromatographic techniques. Prerequisite: CHM 311. 2 Lect., 3 Lab.

341 BIOCHEMISTRY (4) A study of carbohydrates, lipids, proteins, enzymes, nucleic acids, vitamins and hormones in terms of structure, function and synthesis in living systems. The laboratory includes the isolation, identification and chemical behavior of biochemically important molecules. Prerequisite: CHM 212 or consent of instructor. 3 Lect., 3 Lab.

342 PHYSICAL CHEMISTRY FOR THE LIFE SCIENCES (4) A one semester course in physical chemistry emphasizing subjects bearing on the life sciences. Topics include buffers, bioenergetics, kinetics of enzyme reactions, colloidal and large partical systems, membrane phenomena, nuclear chemistry and elementary treatments of traditional subjects in physical chemistry. Prerequisites: CHM 212 and PHY 211. 3 Lect., 2 Lab.

352 RADIOCHEMISTRY (3) Study of radioisotope methodology. A laboratory oriented course familiarizing the student with radiation detection and applications in natural science problems. The course is of practical value to the B.S. and B.A. science major. Prerequisite: junior or senior science majors or permission of the instructor. 2 Lect., 3 Lab.

410 SEMINAR (1) Reports emphasizing chemical literature searches and/or current research. Prerequisite: upper division chemistry majors.

420 QUALITATIVE ORGANIC CHEMISTRY (3) The identification of organic compounds by various classical and instrumental techniques. Prerequisite: CHM 212. 2 Lect., 4 Lab.

421 ADVANCED ORGANIC CHEMISTRY (3) An advanced lecture course designed to deepen and expand knowledge in the field. Topics such as reactions, mechanisms, reactive intermediates, photochemistry, kinetics, stereochemistry, natural products and spectroscopy may be stressed. Prerequisite: CHM 212.

431 ADVANCED INORGANIC CHEMISTRY (4) A presentation of atomic structure and periodic properties. In addition to other topics, valence bond, modecular orbital, crystal field and lignad field theories are treated in detail. Laboratory sessions include one hour of lecture on theory and techniques in the preparation of representative compounds. 3 Lect., 4 Lab.

432 STRUCTURAL CHEMISTRY (3) Modern methods of structure determination of inorganic and organic compounds. X-ray diffraction, ultraviolet and infrared absorption spectra, mass spectrometry, and nuclear magnetic resonance spectroscopy are discussed in detail. Prerequisite:CHM 332.

490 PROBLEMS IN CHEMISTRY (1-3) Study projects under the direct supervision of an instructor. Library and laboratory research in selected problems. Prerequisite: consent of instructor.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

COMMUNICATIONS (COM)

101 ORAL COMMUNICATIONS (3) Required of all Mansfield students. Its objectives are to help the student to formulate his/her own ideas coherently, evaluate factual material and use sound reasoning patterns in his/her preparation and attempts to communicate concepts orally; to determine and select the most effective means of expression in formal and informal speaking situations. 1 Lect., 2 Recit.

200 ORAL INTERPRETATION (3) An introductory course in presenting oral readings of various literary genres; written analysis and practical experience in presenting selections. Understanding and appreciating oral interpretation as the communication of the reader's impression of the author's intent as an artistic representation of his world in a piece of literature. Prerequisite: COM 101 or consent. 1 Lect., 2 Recit.

201 INTRODUCTION TO MASS MEDIA (3) Concerned with the application of modern mass media, its origin, history, theory, principles and philosophy to the areas of entertainment, instruction, and audience persuasion. Practical experience provided in the basic media. 2 Lect., 1 Recit.

203 VOICE AND ARTICULATION (3) Study of basic physiology and phonetic analysis and transcription; and evaluations of the student's speech. Attention is given to the correction of individual faults in voice and articulation habits in order to achieve clear and effective communication. Prerequisite: COM 101 or consent. Recommended for all students. 1 lect., 2 Recit.

204 PUBLIC SPEAKING (3) Advanced study of the construction, preparation and delivery of the basic types of speeches and their effect in public speaking situations. Prerequisite: COM 101, or consent. 1 Lect., 2 Recitation.

206 FORENSICS (1) Designed for the student interested in intercollegiate forensics. The theory and practice of competitive speaking in debating, extemporaneous speaking, original oratory, interpretation and other forensic events. COM 206 may be repeated through the 8 semester sequence for 1 semester hour per semester. Prerequisite: consent of instructor. 2 Lab.

207 ARGUMENTATION AND DEBATE (3) Study of theory, practice, history, principles, philosophy and uses of argumentation and debate situations. Prerequisite: COM 101 and consent of instructor. 1 Lect., 2 Recit.

210 INTRODUCTION TO PUBLIC RELATIONS (3) Study of the history, principles, and practice of public relations in business, education, government, and other organizations. 3 Recitation.

301 TELEVISION PROGRAM DESIGN (3) Study of the theoretical and practical aspects of television program conceptualization, scripting, production, presentation, and evaluation. Prerequisites: COM 201, Introduction to mass media and consent of instructor. 3 Recitation.

302 RADIO PRODUCTION AND MANAGEMENT (3) Study of the theoretical and practical aspects of radio production for a variety of station formats. Also studies station management, sales, and advertising. Prerequisites: COM 201 and/or permission of instructor. 3 Recitation.

303 TELEVISION AND RADIO ANNOUNCING (3) In-depth training in effective communication skills employed by broadcasters. 3 Recitation.

304 TELEVISION PROGRAM DESIGN II (3) Study of the theoretical and practical aspects of Television Program conceptualization, scripting, production, editing, presentation, and evaluation. The emphasis is on the application of these elements to a program of 30 minutes or longer.

305 DISCUSSION AND GROUP DYNAMICS (3) The course includes: (1) a study of the principles, techniques, nature, and purposes of discussion; (2) an investigation of the use of discussion techniques in a democratic society for formal, informal, public, and private situations; (3) a study of the characteristics and techniques of leadership, how group members interact, the nature of group thought and action, group communication patterns and networks, techniques for improving group health. 3 Recitation.

308 READERS THEATRE (3) Techniques involved in the organization and presentation of Readers Theatre and Bhamber Theatre productions. Performance, direction, and selection of materials. Prerequisites: COM 200 or consent of instructor. 1 Lect., 2 Recit.

310 PUBLIC RELATIONS WORKSHOP (3) Practical study of public relations. Student plans and directs a public relations program for an on-campus organization. Prerequisite: COM 210. 3 Recitation.

320 ADVANCED PUBLIC RELATIONS (3) An advanced level investigation of the theory and practice of public relations. Special emphasis on discovering the various publics; simulated public relations campaigns. 3 Recit.

325 INTERPERSONAL COMMUNICATION (3) Development of cognitive, affective, and psychomotor skills as they relate to interpersonal communication. Class participation in both the discussion of principles and application of interpersonal exercises. 3 Recitation.

330 PARLIAMENTARY PROCEDURE (3) History, philosophy, and practice of parliamentary procedure as it applies to our democratic society. Emphasis on the development of procedures. Practice in the use of the theories. 3 Recitation.

400 COMMUNICATION THEORY (3) Study of the major concepts, principles, models, and theories of human communication. General Systems Theory, General Semantics, role behavior, the diffusion of innovation, the role of language in communication, linguistics, and the psychology of communication provide a framework for an investigation of the process of communication on the intrapersonal, interpersonal, small group, one-to-many, and mass media levels. 3 Recitation.

401 PERSUASION (3) The psychology of persuasion and its use in a free society. Propaganda and its effect on our daily living. Preparing the student to evaluate persuasive messages, to use persuasion effectively, and to appreciate the ethics of persuasion. 3 Recitation.

402 WORKSHOP IN SPEECH COMMUNICATION AND THEATRE (3) Two or three week concentrated summer workshop course in current techniques related to general and specific communication situations. Direct contact between experts in communications and workshop students. Innovative instructional procedures through team teaching and interdisciplinary approaches. 1 Lect., 2 Recit., 2 Lab.

403 CRITICAL SURVEY OF PUBLIC ADDRESS (3) Analysis of outstanding speeches focusing on rhetorical theory and its development. The history of oratory, rhetorical criticism, and public address. 2 Lect., 1 Recit.

404 TELEVISION REPORTING (3) This course focuses on concepts and practice of broadcasting techniques as applied to live and taped television performance. Prerequisites: COM 203, 303, 304, or permission of instructor.

405 CREATIVITY IN THE RELATED ARTS (3) A philosophical approach to the creative process. Arts experiences using color, movement, sound, form and space. Developing an understanding of the creative process and of aesthetic principles.

410 (THT) PREPROFESSIONAL EXPERIENCE (6-15) Supervised and evaluated participation in varied settings provides practical application of theoretical principles.

430 ADVANCED TELEVISION PROGRAM DESIGN (3) Designed to give the student experience working with dramatic and variety television formats. Experience with advanced television production techniques. Prerequisites: COM 201, 301.

450 (THT) SPECIAL PROJECTS (1-3) Initiated by the student to increase his/her knowledge in an advanced are not offered as a regular class. Intensive study under the guidance of a faculty member who has special expertise in that subject. Prerequisite: permission of instructor.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

COMPUTER AND INFORMATION SCIENCES (CIS)

101 COMPUTERS IN SOCIETY (3) An introduction to computing, designed to acquaint the student with the broad impact of computers on modern society, and to provide a basic understanding of how to program and use them. Particular attention will be paid to the extension of concepts and capabilities made possible by the advent computers. Through the use of the computer in a variety of applications drawn from the social sciences and humanities, as well as from the natural sciences, it is stressed that the computer is not primarily a numerical calculator but a general symbol processor.

103 INTRODUCTION TO MICROCOMPUTERS (3) This course is designed specifically to develop an understanding of the capabilities and limitations of the microcomputer, and to equip the student with computer skills to the extent that the microcomputer can be used as a valuable tool in further coursework in the student's academic discipline. Students will be required to perform programming assignments and to demonstrate competence and proficiency in the operation and programming of the microcomputer as a course requirement.

104 INTRODUCTION TO COMPUTER SCIENCE (3) Algorithms, programs, and computers. Basic programming and program structure. Programming and computing systems. Debugging and verification of programs. Data representation. Organization and characteristics of computers. Survey of computer languages, systems, and applications. Computer solution of several numerical and non-numerical problems using one or more programming languages.

105 PROGRAMMING AND INFORMATION PROCESSING (3) Topics to be covered will be definition of the problem, problem analysis, programming analysis to include flowcharting and decision tables, program preparation, optimization using the Common Business Oriented Language (COBOL), program operation and maintenance, and documentation. Examples of problems and programming solutions will be used throughout the course. The student will be expected to write and execute programs on the computer. Prerequisite: CIS 104 recommended.

205 INTRODUCTION TO FILE PROCESSING (3) Design of data bases and their retrieval and maintenance systems. Job control language methodology. Use of available packages and special purpose languages. The application of computers in the areas of management will be stressed; considerable programming projects are a part of this course. Prerequisites: CIS 104, 105 or MA 107.

225 (ACC) AUTOMATED ACCOUNTING SYSTEMS (3) A general introduction to the development and implementation of an electronic data processing accounting information system. Approach, elements of design, input media, computer-based accounting, audit trails, relevancy and timeliness of information. Prerequisites: ACC 215 and CIS 105.

230 LANGUAGE AND STRUCTURE OF COMPUTERS (3) Fundamentals of assembly language programming. The logical basis of computer structure, machine representation of information, flow of control, instruction codes, arithmetic and logical operations, indexing and indirect addressing, input-output symbolic representation of programs and assembly systems, and recent advances in computer organization. Prerequisites: CIS 104, 105, or MA 107.

261 ANALYTICAL METHODS OF INFORMATION SCIENCE (3) Key mathematical developments in computer and information science. Sets, functions, and relations. Recursion. Formal language theory and finite state machines. Graphs and digraphs. List processing. Switching circuits. Program verification and correctness. Other selected topics.

301 DATA STRUCTURE (3) Representation, classification and management of information. Involves data organization; relationships between data items, fields, records, files and volumes; ordering of data into arrays, trees and graphs; input devices; sequential and random access concepts of data management and algorithmic and string manipulation languages applied to these data structures. Prerequisites: CIS 104, 105, or MA 102; and MA 109.

310 INTRODUCTION TO SYSTEM ANALYSIS (3) An introduction to the concepts of systems analysis and design. Problem definition; data gathering, information analysis, presentation techniques, implementation planning, system controls, documentation. Selected case studies. Prerequisites: CIS 225 and BUS 130.

325 OPERATING AND PROGRAMMING SYSTEMS (3) Functions of computer components (CPU, reader, punch, tapes, printer, memory), systems, hardware, operation, maintenance, accounting routines. Insight into the function of translators, compilers, monitors, assemblers, processors, generators, data scheduling systems, simulators, sort-merge, control and supervisory systems, libraries and systems support. Prerequisite: CIS 230.

335 ASSEMBLY LANGUAGE PROGRAMMING (3) Machine organization for large-scale general purpose computer. Assembly language programming. Students write specific programs in assembler. Introduction to I/O macros and subroutines w/application in the system area being stressed. Prerequisite: CIS 235.

401 MANAGEMENT INFORMATION SYSTEMS (3) The advanced study of information processing systems which provide both transactional processing for an organization and also information and processing support for management and decision functions. Prerequisite: CIS 301 and CIS 310.

420 SPECIAL PROBLEMS IN COMPUTER APPLICATIONS (1-3) An individualized honors course designed to allow a student to pursue a specialized topic or project under supervision. Credit is granted according to the scope and nature of the project. Student may be nominated or sponsored by the professor interested in the work. Course may be repeated for different projects. Prerequisite: permission of instructor.

430 ORGANIZATION OF PROGRAMMING LANGUAGES (3) Discussion of models and techniques used in the design and implementation of compilers. Topics include lexical analysis, compilation of arithmetic expressions and simple statements, specification of syntactic analysis code generation, and optimization. Prerequisite: CIS 205, 335; and MA 260 (recommended).

441 SWITCHING THEORY AND LOGIC DESIGN (3) An introduction to ideas and principles of electronic digital circuits used in all digital computers* and also in digital instruments, digital communication systems, digital control systems, and in fact in all digital devices. Topics presented will include Boolean algebra, switching theory, logic design, and major digital circuit lines. *(Micro processors, micro computers, mini computers, and medium to large main frame computers)

480 OPERATIONS RESEARCH (3) The development and use of the techniques of operations research. Topics include linear programming, queuing theory, probabilistic inventory models and simulation. Prerequisites: CIS 105 or MA 107; MA 105; MA 109; and MA 111.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

COOPERATIVE EDUCATION (COE)

250 COOPERATIVE EDUCATION I (3-15) Cooperative Education is a work experience program which gives the student a chance to work in his field of study while attending college. It is intended to supplement and extend his classroom experiences.

450 COOPERATIVE EDUCATION II (3-15) Cooperative Education is a work experience program which gives the student a chance to work in his field of study while attending college. It is intended to supplement and extend his classroom experiences. Prerequisites: COE 250 and other prerequisites determined by the participating departments.

CRIMINAL JUSTICE ADMINISTRATION (CJA)

100 INTRODUCTION TO THE ADMINISTRATION OF CRIMINAL JUSTICE (3) An introduction to the field of criminal justice; the historical development of the police, courts and correctional institutions of government; the conceptual and philosophical issues relating to contemporary law enforcement, courts and corrections; the literature, studies, research and authorities in criminal justice; careers in criminal justice.

201 INTRODUCTION TO CORRECTIONS ADMINISTRATION (3) Origin and history of incarceration practices and procedures; associated organizational, criminological and penological concepts; categories of inmates and laws affecting classification; special custody problems and treating programs; staff organization - professional administrative and custodial personnel training, recruitment and promotions; interagency relationships and cooperation, release programs, furloughs, work-release and final discharge.

202 INTRODUCTION TO LAW ENFORCEMENT (3) An introduction to law enforcement problems and practices; its legal, political and historical framework. An analysis of police organizations, and their relationship with other criminal justice and gencies.

240 ORGANIZED CRIME IN AMERICA (3) An investigation into the history and impact of organized crime upon American social, economical and political institutions. Organized crime prevention, including investigation and prosecution; the education of criminal justice professionals and the general public in coping with organized crime is also stressed.

251 POLICE-COMMUNITY RELATIONS (3) Basic definitions; rule of law; individual and societal aspects of police-community relations; police and minority groups; social change and law enforcement; principles of programming in police-community relations; police discretion; police role, police problems.

252 INVESTIGATION AND INTERROGATION (3) An introduction to the fundamentals of criminal investigation, rules of evidence, sources of information, observations, descriptions and identifications, including collection, preservation and processing of physical evidence, records, reports, statements, case preparation, surveillance and undercover techniques, modus operandi and raids.

256 PROBATION, PAROLE AND COMMUNITY CORRECTIONS (3) Examination of community treatment in the correctional process; contemporary usage of presentence investigation, selection, supervision, release of probationers and parolees.

257 CORRECTIONAL INSTITUTIONS AND SERVICES (3) Intensive analysis of extramural programs for juvenile and adult offenders; professional functions in the total correctional process.

276 CRIMINOLOGY: A MULTIDISCIPLINARY APPROACH (3) To expose students to the nature and forms of crime. Major areas of concern are the functions of law, the scientific study of crime, criminological typologies, social definitions of crime, comparative criminology, and the problem of punishment.

295 DELINQUENCY AND THE CRIMINAL JUSTICE SYSTEM (3) To expose the student to the full impact of the delinquency problem. Theories of delinquency causation, prevention, and rehabilitation will be critically examined.

301 INDUSTRIAL SECURITY (3) Basic industrial security concepts, principles and methodologies. The student is provided with a knowledge of procedures and program currently applied in industrial security management.

324 ADMINISTRATION OF JUSTICE (3) An examination of the role and function of the judiciary in the policy-making process. Emphasis is placed on the variable affecting the process of judicial decision-making as well as a study of modes of compliance by the populace to judicial decisions.

326 COURT MANAGEMENT (3) The major problem areas of court administration; judges as administrators, budgeting, calendars, caseflow management; jury selection, juror utilization, records management, legal forms, forms design, personnel practices and administration. This course is oriented around problem solving. Field trips investigation and guest lectures will supplement the materials presented in class.

336 CRIMINALISTICS (3) Examines the phase of the criminal investigation process concerned with physical evidence. Major emphasis will be placed upon legal and technical consideration in the recognition, collection, and preservation of various categories of physical evidence and the process through which it is transmitted to the crime laboratory. Attention will also be given to knowledge requirements of the evidence technician in terms of the capabilities and techniques of the crime laboratory. Prerequisite: CJA 252.

340 MANAGEMENT OF VOLUNTEERS IN CJA (3) Develops an understanding of the importance of the volunteer movement in criminal justice administration. It shows how volunteers have been and can be used in criminal justice agencies. It analyzes the motives of volunteers and assists the professional in the screening and training of volunteers. It also discusses the recruitment and rewarding of volunteers.

354 CRIMINAL LAW (3) Principles, theories and doctrines of the law of crimes with a unified study of legal defenses; elements and proof in crimes of frequent concern; importance of criminal law at the enforcement level is considered from the crime prevention to the courtroom; case analysis.

355 EVIDENCE AND CRIMINAL PROCEDURE (3) Rules of evidence of particular import at the operation level in law enforcement; types of evidence; principles of admissibility; the attendance and production of witnesses, their competency and impeachment; arrest, search and seizure; use of force; Supreme Court decisions affecting this area of criminal justice administration.

356 LAW OF CORRECTIONS (3) Analysis of the legal dimension of sentencing; the correctional treatment of persons under sentence, and conditional release and revocation with emphasis on administrative decision-making in the correctional process.

357 CORRECTIONAL STRATEGIES (3) Offender classification; special offender groups, treatment, custody, recidivism, strategies designed to change offender conduct.

359 JUVENILE JUSTICE (3) Structure and format of the juvenile justice system-police, courts and corrections; analysis and description of the organizational structure of each of the subsystems of the juvenile justice process; introduction to juvenile justice literature and research findings.

401 ADVANCED INDUSTRIAL SECURITY (3) Advanced course of industrial and government security concepts, principles, and methodologies; knowledge of relationships of industrial security procedures in business organizations to the Department of Defense National Security Program.

405 RESEARCH METHODS IN CRIMINAL JUSTICE (3) The collection and use of information has become an area of major concern in the field of criminal justice. This course introduces the student to the main types of research methods and data collection techniques used by various criminal justice agencies including the police, courts, correctional institutions, etc.

450 PRACTICUM IN CRIMINAL JUSTICE ADMINISTRATION (1-12) Educational and work experience in an actual criminal agency-law enforcement, courts, corrections; and industrial security; applicable agency research project; periodic conference with criminal justice agency personnel and faculty advisor.

453 POLICE ORGANIZATION AND ADMINISTRATION (3) Organizational theory, budgeting, personnel management planning, information management theory, civil service, unions, management prerogatives, supervision, executive development, manpower distribution schemes, and policy development and execution as applied in both small and large law enforcement agencies. Prerequisites: PSC 240.

496 SELECTED TOPICS (3) An intense analysis of selected topics in law enforcement, adjudication, and correctional fields. Intended for advanced undergraduates, graduates, and inservice professionals.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

ECONOMICS (ECO)

101 AMERICAN ECONOMY:MACRO (3) An introduction to aggregate economics with emphasis on interdependence of sectors of an economy, aggregate concepts, determination of national income and fiscal and monetary policy for stabilization.

102 AMERICAN ECONOMY:MICRO (3) The mechanism of the free enterprise system: pricing, production, and employment under various market conditions; functional distribution of income; selected topics in modern theory of general equilibrium and welfare economics.

204 HISTORY OF ECONOMIC THOUGHT (3) A study of economic ideas from the eighteenth century to the present. A brief review of physiocracy and mercantilism followed by a closer survey of classical liberalism, pre-Marxist and utopian socialism. Marxism, neoclassicism, institutionalism and other contemporary developments.

205 CONTEMPORARY ECONOMIC PROBLEMS (3) Examination of some of our crucial economics problems; unemployment, inflation, poverty; also some of the minor issues; right-to-work, national debt, and of several international concerns, i.e., the Common Market.

301 INTERMEDIATE MACROECONOMIC THEORY (3) A course in intermediate macroeconomic theory which develops models of the macroeconomy and analyzes the level and distribution of income, theories of unemployment, theories of consumption, theories of the public economy, theories of investment, the role of money, theories of crisi, theories of inflation, and theories of growth from alternative paradigms. A macroscopic view of the economy and the ability to analyze and forecast business conditions are developed. Prerequisites: ECO 101; MA 109 recommended.

302 INTERMEDIATE MICROECONOMIC THEORY (3) Introduction to the models and methods of modern microeconomic theory, concentrating on individual and firm decision making and on industry equilibrium; a brief treatment of general equilibrium theory and welfare analysis.

311 MONEY AND BANKING (3) An inquiry into the monetary system of the U.S. Brief examination of historical development; the functioning of monetary policy is considered. Emphasis on the public/private nature of our banking system.

315 PUBLIC FINANCE (3) This course investigates theories of taxation; normative and positive theories of the public economy ; various taxes; tax incidence and the distribution of income and wealth; taxes and microeconomic behavior; and the distribution of expenditure benefits. The course provides students with an understanding of the functions of taxation and public expenditures in the process of accumulation and legitimization. Prerequisites: ECO 101 and 102.

333 (BUS) INTERNATIONAL FINANCIAL MANAGEMENT AND ECONOMICS (3) This course provides students with a background in international economic activity. Both orthodox trade theory and theories of unequal trade and imperialism are presented. The U.N. call for a "New International Economic Order" is discussed. Balance of payments and international monetary institutions are discussed. The rise of multinational firms, the management of their financial affairs and their effects on world development are investigated. Prerequisites: ACC 111; ECO 101, 102; concurrent enrollment in BUS 340 suggested.

401 LABOR RELATIONS (3) Equal consideration is given to the market and institutional factors of labor management relations. The role of government especially as defined in major legislation is examined. Historical development of trade unions serves as an introduction.

410 MONETARY THEORY (3) Microeconomic and Macroeconomic theories of the supply and demand for money; money substitutes and their significance; review of current empirical research, money in closed economy, and static general equilibrium model; and analysis of inflation and unemployment.

415 ECONOMETRICS (3) The orientation of this course is toward the analysis and interpretation of economic data. This course will examine the general linear regression model and its application to economics, including violation of the assumption of the classical model.

420 INDUSTRIAL ORGANIZATION (3) Market structure, conduct, and performance in the unregulated sector of the American Economy. The characteristics and economic problems of regulated public utilities. Public policies related to promotion or restriction of competition.

485 MANAGERIAL ECONOMICS (3) A rigorous development and application of micro and macro economic theory with an emphasis on tools and techniques most useful to managers as an aid to decision-making and forecasting of the economic environment in which firms must operate. Demand analysis, production analysis, cost analysis, X-Efficiency Theory, market structures and pricing, and business cycle analysis and forecasting will be among the topics covered. The course provides students with an intermediate to advanced background in economic theory and its application in analysis and decision-making. Prerequisites: ECO 101, 102; MA 105, 109, 111; senior standing or permission.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

EDUCATION - ELEMENTARY (ELE)

090 BASIC READING/STUDY SKILLS (3) A program designed for students needing a remedial or corrective reading program. Does not count toward the total needed for graduation. 2 Lect., 1 Lab.

185 ADVANCED READING/STUDY SKILLS (2) A program designed for students needing assistance in developmental reading. 1 Lect., 1 Lab.

201 PREPROFESSIONAL EXPERIENCES (1) The course provides freshmen with the following seminar experiences: orientation to the Education Department and the Division of Professional Studies, examination of goals of elementary education and the expectations of elementary teachers, study of principles affecting teaching-learning situations, study of observation criteria and procedures, and informational advisement seminars. 1 Lect.

202 PREPROFESSIONAL EXPERIENCES (2) The course provides sophomores with clinical experiences in elementary education which include identification and analysis of current educational practices, brief episodes of exploratory teaching, investigations of career possibilities and their requirements, an orientation to the Education Department and the Division of Professional Studies, and informal advisement seminars. 2 Lect.

300 BEGINNING SCHOOL YEARS (3) A study of the developmental needs of the young child, theoretical bases for major teaching functions, current trends in activities, teaching procedures and materials, and observation in neighboring schools.

301 OBSERVATION AND PARTICIPATION IN ELEMENTARY EDUCATION (2-3) The course provides juniors with the following observation, participation, and professional guidance experiences: observation of an elementary classroom, orientation to policies and practices of an elementary school, opportunity to observe the inservice teacher in the performance of his/her duties, introduction to administrative duties of an elementary classroom, the privilege of working with individual children, small groups of children and an entire classroom under supervision, and the opportunity to receive feedback on performance from the cooperating teacher and the college supervisor. 1 Recit., 3 Lab.

350 CHILD DEVELOPMENT (3) An interpretive description of human growth from conception through infancy, toddlerhood, preschool and school years, adolescence and into maturity.

360 CHILDREN'S LITERATURE (3) Uses of children's literature in the preschool and elementary school curriculum; promoting interest in children's books; social themes and issues reflected in children's literature.

383 TEACHING OF READING IN THE ELEMENTARY SCHOOL (3) Theoretical bases of the reading process; components of reading skill; major approaches to instruction; methods and materials for teaching elementary reading.

384 TEACHING OF ELEMENTARY SCHOOL MATHEMATICS (3) Methods of teaching mathematics, examination of curriculum and materials pertinent to teaching mathematics, and development of mathematical skills required of the elementary school teacher.

386 TEACHING OF SOCIAL STUDIES (3) Principles, problems, materials, and techniques for the teaching of elementary social studies.

387 TEACHING OF SCIENCE (3) Principles, problems, materials and techniques for the teaching of science in the elementary schools.

400 STUDENT TEACHING (12) (By Arrangement) Opportunity to apply knowledge and skills acquired in professional preparation. Accomplished by a field experience in university-established centers under supervision of qualified cooperating teachers. Observations and conferences are scheduled by the department supervisor. Required course for all elementary education majors seeking certification to teach.

401 SEMINAR IN ELEMENTARY EDUCATION (2) For seniors, orientation and critiques concerned with classroom problems, and examination of school law, school organization and administration.

402 SELECTED TOPICS IN ELEMENTARY EDUCATION (1-3) Designed to let students carry out in-depth studies in elementary teaching techniques. Include lectures, seminar periods, and resource persons. Emphasis on student leadership, participation, and reading and discussion of educational literature. Open to in-service teachers and senior elementary majors.

403 COMMUNICATION SKILLS WORKSHOP FOR ELEMENTARY SCHOOL TEACHERS (3) Designed as a workshop for undergraduate students who have completed ELE 383 and for in-service classroom teachers. Emphasis is on investigating techniques used by elementary teachers to improve communication skills of children. Prerequisite: ELE 383.

425 DIAGNOSTIC AND REMEDIAL READING (3) Tests and techniques to prevent, detect, and correct reading difficulties; special methods and materials for problem readers. Prerequisite: ELE 383.

488 INFORMAL DIAGNOSIS OF READINESS IN ELEMENTARY TEACHING (3) Designed to alert teachers to cognitive and affective factors which influence a child's readiness to learn. Emphasis is on informal assessment of cognitive and affective behavior as a basis for decisions about instruction for a child.

489 ENVIRONMENTAL EDUCATION FOR ELEMENTARY TEACHERS (3) A study of the methods, materials, and science background necessary to teach environmental education. Emphasis is on both science content and psychological grade placement of various activities.

EDUCATION - SECONDARY (ED)

100 SCHOOLS AND SOCIETY (3) A basic resource for understanding the critical problems facing public policy in education and gaining reliable knowledge about the educational past.

111 SEPEP I (Secondary Educational Professional Experience Program) **(1)**

211 SEPEP II (Secondary Educational Professional Experience Program) **(1)**

311 SEPEP III (Secondary Educational Professional Experience Program) **(1)**

411 SEPEP IV (Secondary Educational Professional Experience Program) (1) A modularized course composed of experimental activities with emphasis on current educational theories and practices. Each student is required to complete observation and participation experiences in educational settings. SEPEP IV is to be scheduled the semester before student teaching.

201 PERSONAL CAREER DEVELOPMENT (2) Designed as an overview of the world of work relevant to western society. Current theories of vocational development are explored and the student's vocational development is investigated. Laboratory work involves the collecting, evaluating, classifying, and dispensing of occupational, educational, and social information.

230 (PSY) EDUCATIONAL PSYCHOLOGY (3) A study of the basic factors in the learning process. Emphasis on the application of principles of psychology to problems of learning and teaching. Prerequisite: PSY 101.

300 SECONDARY SCHOOL METHODS (3) Principles, materials, and methods of teaching in the secondary school. Students should consult their education advisor concerning spring and/or fall offerings of this course. 3 Lect.

301 EVALUATIVE TECHNIQUES (2) Elementary statistics, principles of test construction, selection and administration of standardized tests; emphasis on interpreting and reporting test scores; consideration of means of evaluation other than traditional paper and pencil tests.

302 INSTRUCTIONAL TECHNOLOGY (2) An introduction to both traditional and contemporary types of instructional media including micro-computers, interactive teleteaching, and telecommunications. Students demonstrate skill in the use, production, and operation of selected areas of this technology.

306 TUTORING IN THE EDUCATIONAL SYSTEM (3) Offers training in tutoring techniques for various subjects. Provides information in training, utilizing, and evaluating tutors in elementary and secondary classroom. Student participants in supervised tutoring sessions with college students. 2 Lect., 2 Rec.

310 BASIC READING PRACTICES FOR CONTENT AREA AND SPECIAL TEACHERS (3) Designed to provide instructional experiences that enable secondary content teaching candidates and special field teacher candidates to develop selected basic knowledge, skills, and attitudes regarding the reading learning process.

330 GUIDANCE AND COUNSELING TECHNIQUES (3) (Summer Only) The responsibility of the teacher in the guidance program of the school; the identification of student problems; significant information and its use; techniques in guidance and counseling.

400 STUDENT TEACHING (12) (By Arrangement) Opportunity to apply knowledge and skills acquired in professional preparation. Accomplished by a field experience in university-established centers under supervision of qualified cooperating teachers. Observations and conferences are scheduled by the department supervisor. Required course for all secondary education majors seeking certification to teach.

401 HISTORY AND PHILOSOPHY OF EDUCATION (3) Foundations course in the study of professional foundations of education, and the relationship that exists between the school and the society it serves.

402 CONTEMPORARY ISSUES IN EDUCATION (2) Special programs are scheduled to orient class participants to current issues in education. 2 Lect., 1 Rec.

420 BASIC PHOTOGRAPHY (3) A thorough introduction to the basic tools and creative techniques of black and white photography. Topics include operation and use of 35 mm camera and lens, exposure, film processing, printmaking, composition and design, and developing visual sensitivity. 2 Lect., 1 Lab.

421 TELEVISION PRODUCTION (3) Covers the fundamentals and principles involved in the production of television programs. Includes the operation of TV equipment, production of visuals used in TV, and the production of a program. 2 Lect., 1 Lab.

422 BASIC MOTION PICTURE PHOTOGRAPHY (3) Examines the process of planning and production of 8 mm and 16 mm films. Students plan the content for their films, select the treatment, film the subject, edit the film, add sound, and demonstrate the use of their film. Prerequisites: ED 420 or ED 421 or permission of the instructor. 2 Lect., 2 Lab.

480 COMPUTERS IN EDUCATION (3) This course is designed to instruct undergraduate education majors in the various uses of computers in the schools. Prerequisite: Junior or Senior standing in education or by permission of the instructor.

485 (HEC) TEACHING OF ADULTS (3) Students identify characteristics and needs of various target groups choosing or needing to be involved in educational offerings for adults. They explore learning as phenomenon relative to many societal influences, and develop programs and teaching modules and units which serve both society and the individual. Prerequisite: permission of instructor.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

ENGLISH (ENG)

090 BASIC WRITING SKILLS (3) Prepares students to do college-level writing. Does not count toward the total semester hours needed for graduation.

112 COMPOSITION I (3) Intensive reading and writing of expository prose. Analytical and critical thinking and college-level research skills are emphasized. Prerequisite: Placement score 78 [5] or ENG 090.

113 INTRODUCTION TO LITERATURE (3) Introduces students to reading poetry, fiction, drama for understanding and enjoyment. Fall.

205 MYTHOLOGY AND THE MODERN WORLD (3) Selected works of modern literature against a background of Greek, Roman, Judeo-Christian and other mythologies. "Mythology" signifies the study of recurring patterns in thought and literature, not the separation of truth from fiction. Spring.

206 THE SHORT STORY: A MIRROR OF HUMAN EXPERIENCE (3) Studies of the short story as a medium for exploring human experience: the stages of life, the making of moral choices, and the impact of scientific and social change. Spring.

210 LITERATURE OF THE WESTERN WORLD I (3) Studies of literary classics from ancient times to the close of the Renaissance.

211 LITERATURE OF THE WESTERN WORLD II (3) Studies of literary classics from the age of reason to the present. A continuation of ENG 210.

213 CRIME IN LITERATURE (3) Studies representative of European and American literary works that focus on the problem of crime and the necessity to deal with it. Spring of even years.

220 SPECIAL TOPICS IN LITERATURE (3) Studies of one of the following topics: Black Literature, Women's Literature, Recent Literature, Science Fiction, Detective Fiction, or The Bible as Literature.

224 INTRODUCTION TO LINGUISTICS (3) Methods of analysis and description of language and ways in which human beings use their language. Of interest to students who wish to continue study of linguistics as well as those in a variety of professions who wish to read with understanding linguistic literature in their own field. Fall.

225 ENGLISH GRAMMAR (3) Studies of introductory transformational grammar of English with attention given to a traditional analysis and to usage. Spring.

226 HISTORY OF THE ENGLISH LANGUAGE (3) Studies of the development of the English language from Old English to modern times with special attention to the causes of linguistic change. Fall.

230 WRITING FOR BUSINESS AND TECHNOLOGY (3) An intensive course for students who wish instruction and practice in report writing, business writing, and technical writing. Emphasis will be placed on the particular writing needs of each student. Spring of even years.

232 INTRODUCTION TO FOLKLORE (3) Introduces students to folklore with emphasis on the oral tradition in British-American ballads, folktales, customs, beliefs, observances, speech, and material culture. Spring.

235 CREATIVE WRITING (3) Theory and practice of fiction, poetry, or drama. Prerequisites: ENG 112 and permission of the instructor. Fall of odd years.

290 INTRODUCTION TO FILM CRITICISM (3) Analysis and evaluation of film through a study of its elements. Fall.

291 FILMS AND FILMMAKERS (3) Analysis and evaluation of the feature length film as a literary form. Spring.

299 COMPARATIVE LITERATURE (3) Studies of major works in a genre or movement, with at least three national literatures, excluding American British, represented. Fall of even years.

301 THEORY AND PRACTICE OF WRITING (3) Analyzes the process of writing and the method of presenting this process in the classroom as well as providing an opportunity to practice classroom presentation. Recommended to all future teachers. Fall. Prerequisites: ENG 112, ENG 313.

313 COMPOSITION/LITERATURE II (3) Study of significant literary texts which serve as a basis for serious, thoughtful, mature writing. To be taken in the junior year and to be passed with a grade of "C" or better before graduation. Fall and spring. Prerequisites: Junior standing, 64 credits earned.

333 ADVANCED COMPOSITION (3) Intensive writing in area of each student's principal interest. Students not majoring in English admitted by consent of instructor. Spring. Prerequisites: ENG 112, ENG 313.

337 AMERICAN LITERATURE TO 1865 (3) Studies of major 17th, 18th and 19th century American writers, with emphasis on their works as works and as a part of a continuing literature and culture. Spring of even years.

338 AMERICAN REALISM AND NATURALISM: 1865-1914 (3) Studies of major Realists and Naturalists in American literature with an emphasis on their works, their literary apology, and their influence. Fall of odd years.

339 AMERICAN LITERATURE SINCE 1914 (3) Studies of major 20th century American writers, emphasizing their works, their social consciousness, their influence on their own generation, and their probable influence on following ones. Spring of odd years.

340 OLD AND MIDDLE ENGLISH LITERATURE (3) Studies representative works of prose, poetry, and drama from the Anglo-Saxon period to 1500, with special attention given to the work of Geoffrey Chaucer. Fall of even years.

341 BRITISH LITERATURE 1500-1700 (3) Studies representative of British works of prose, poetry, and drama from 1500 to 1700, with special attention given to the development of modern love and religious lyrics, narrative poetry and prose, and the Miltonic epic. Spring of even years.

342 NEOCLASSIC AND ROMANTIC BRITISH LITERATURE (3) Studies of major English writers, social and idealogical factors, of the Enlightenment, the pre-Romantic Movement, and Romantic Movement. Fall of odd years.

343 VICTORIAN AND EDWARDIAN LITERATURE (3) Studies of major British writers from 1830 to 1914; social and intellectual influences of the period. Spring of odd years.

344 BRITISH LITERATURE SINCE 1914 (3) Studies of British literature from 1914 to the present. Attention will be given to major authors in poetry, fiction, drama, and criticism. Syllabus varies with instructor. Fall of even years.

358 SHAKESPEARE (3) Selected plays of Shakespeare; interpretation and evaluation with attention to his development as a dramatist and poet. Fall.

401 SEMINAR IN ENGLISH STUDIES (3) Specialized and in-depth study of a major writer, a small group of related writers, a particular genre, or a specific limited time period. Class enrollment restricted to twenty upperclassmen, open to non-majors. Spring of odd years.

410 SENIOR SEMINAR: CULTURAL AND HISTORICAL CONTEXTS OF LITERATURE (3) A chronological and comparative study of the contexts and characteristics of the various identifiable periods in British and American literature from the Anglo Saxon period to the present. Fall. Prerequisite: Minimum of 80 credit hours earned and twelve hours of 300 level literature courses or permission of the instructor.

497 INDEPENDENT STUDY (1-3) Initiated by the student to increase already advanced knowledge in English and guided by a faculty member who has special expertise in the subject. Fall and spring.

FISH CULTURE (BFC)

213 FISH CULTURE I (3) The technology of controlled husbandry of fish in flowing water. Major emphasis on solving problems relative to the intensive aquaculture.

214 FISH CULTURE II (3) The technology of controlled husbandry of fish in standing water. Major emphasis on the science of extensive aquaculture.

215 FISH PATHOLOGY (3) A consideration of the diagnosis and treatment of diseases commonly found in hatchery fish. Diseases of bacterial, viral, parasitic and environmental origin are studied together with recommended treatment for each.

217 FISH MANAGEMENT (3) A consideration of how fish populations become structured and the effects of various rates of exploitation upon these structures. A practical explanation of relative efficiencies of different fish management practices on maintaining fishery yields desirable to anglers is emphasized.

218 LITERATURE REVIEW AND REPORTS IN FISH CULTURE (1) A study of scientific literature of fish culture, with special emphasis on its organization and retrieval and the writing of reports.

404 SEMINAR (1) Students are exposed to the fisher profession through seminars from guest lecturers.

FRENCH (FR)

101 INTRODUCTORY FRENCH I (3) For beginning students and those with less than two years of high school French. Grammar, pronunciation drills, aural comprehension, speaking, reading and writing. Language Lab required weekly.

102 INTRODUCTORY FRENCH II (3) Continuation of FR 101. Prerequisite: FR 101 or equivalent. Language Lab required weekly.

201 INTERMEDIATE FRENCH I (3) Reading texts, grammar review and further practice in aural comprehension, speaking and writing. Prerequisite: two years of high school French, or FR 102. Language Lab required weekly.

202 INTERMEDIATE FRENCH II (3) Continuation of FR 201. Prerequisite: three years of high school French or French 201. Language Lab required weekly.

205 PHONETICS & PRONUNCIATION (1) Systematic pronunciation drill and phonetic transcription. Prerequisite: FR 101 or equivalent. 1 lecture, 1 lab. Required of all French majors.

280 TOPICS IN FRENCH CIVILIZATION (HISTORY) (3) A brief survey of French history, with particular attention to major events and personalities. Prerequisite: FR 202 or equivalent.

281 TOPICS IN FRENCH CIVILIZATION (GEOGRAPHY) (3) A study of the geography of French-speaking countries. Prerequisite: FR 202 or equivalent.

282 TOPICS IN FRENCH CIVILIZATION (AFRO-FRENCH LITERATURE AND CIVILIZATION) (3) A study of Black literature written in French in Africa and the West Indies. Prerequisite:FR 202 or equivalent.

283 TOPICS IN FRENCH CIVILIZATION (CONTEMPORARY PROBLEMS) (3) A study of the problems facing the people of French-speaking countries. Prerequisite: FR 202 or equivalent.

300 CONVERSATIONAL FRENCH & CIVILIZATION (3) For students wishing to gain more fluency and develop writing skills. Socio-economic, political and cultural topics. Prerequisite: FR 202 or equivalent. May be repeated for credit one time.

305 ADVANCED FRENCH CONVERSATION (3) Further development of the skills practiced in FR 300. Students make oral commentaries and write reports.

320 ADVANCED FRENCH STRUCTURE (3) Final review of the structure of French and study of short literary texts. Prerequisite: FR 202 or equivalent. Required of all French majors.

330 SURVEY OF FRENCH LITERATURE I (3) Selected readings of major French writers through the eighteenth century, outside readings and reports, literary movements, style and form. Prerequisite: FR 202 or equivalent. Required of all French majors.

331 SURVEY OF FRENCH LITERATURE II (3) Selected readings of major French writers since 1800; outside readings and reports, literary movements, style and form. Prerequisite: FR 202 or equivalent. Required of all French majors.

339 FRENCH LITERATURE OF THE MIDDLE AGES AND RENAISSANCE (3) Reading and discussion of the beginnings of French literature to the end of the 16th century. Prerequisites: FR 330 and 331, or permission of instructor.

340 FRENCH CLASSICAL LITERATURE (2) Critical readings and discussion of the major dramatic works of Corneille, Moliere and Racine with supplementary reading on general background. Prerequisites: FR 330 and 331, or permission of instructor.

341 FRENCH LITERATURE OF THE ENLIGHTENMENT (3) Reading and discus,sion of the works of Voltaire, Rousseau, and Diderot. Prerequisites: FR 330 and 331, or permission of instructor.

342 CURRENTS IN NINETEENTH CENTURY FRENCH LITERATURE (3) The works of French authors as well as the main currents and form of literary expression from the beginning of Romanticism to the end of the century; Hugo, Balzac, Stendhal, Flaubert, Zola. Prerequisites: FR 330 and 331, or permission of instructor.

343 ASPECTS OF TWENTIETH CENTURY FRENCH LITERATURE (3) Development of the novel and modern French theatre: Gide, AlainFournier, Proust, Mauriac, Malraux, Sartre, Camus, Bernanos, St. Exupery, Green and Ionesco. Reading and discussion of major works. Written report. Prerequisites: FR 300 and 331, or permission of instructor.

350 DEVELOPMENT OF FRENCH POETRY (3) A study of the major works of poets from Villon to the present. Emphasis on interpretation and diction. Study of the French poetical system. Prerequisites: FR 300 and 331, or permission of instructor.

370-380 FOREIGN STUDY (CREDIT ARRANGED) Foreign study is open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for French 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad available in the Office of the Provost and Vice President for Academic Affairs.

400 SENIOR SEMINAR (CREDIT ARRANGED) Special study projects in French language and literature; independent reading in the defined areas followed by written analytical reports in French. Open to seniors and in exceptional cases to juniors. May be repeated for credit.

405 HONORS COURSE FOR FRENCH MAJORS (CREDIT ARRANGED) An individual problems course. Open to qualified seniors with consent of the department.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

GEOGRAPHY (GEG)

101 WORLD REGIONAL GEOGRAPHY (3) Regional study of the the world with special emphasis on the diversity of human existence and the world-scale problems currently faced.

102 HUMAN GEOGRAPHY (3) The human aspects of geography; the study of people and cultures as reflected in the way they use and modify our earth planet.

111 PHYSICAL GEOGRAPHY (3) Introduces the earth-science component of geography. Topics include: earth-sun relationships, weather and climate, vegetation and soils, landforms.

212 INTRODUCTION TO GEOGRAPHIC RESEARCH (3) An introduction to the various approaches and methods involved in identifying and developing satisfactory solutions to geographic problems.

222 ENVIRONMENTAL LAND USE AND NATURAL RESOURCES (3) Surveys a wide range of environmental issues. Topics include: natural hazards (earthquakes, floods, landslides, etc.), present and alternative energy sources, water resources and water pollution, waste disposal, soil erosion.

230 INTRODUCTION TO CARTOGRAPHY (4) The principles and tools of basic cartography. Emphasis on map projections, map design, and map reproduction.

231 WORLD OF MAPS & MAPPING (3) A map reading and interpretation course. Covers fundamentals such as scale, contour lines, location systems, projections. Emphasizes topographic maps but examines many other types as well. Additional topics include: elementary surveying techniques, plan table mapping, and use of a compass.

260 ECONOMIC GEOGRAPHY (3) Relates modern methods of geographic analysis to the study of population, resources, primary and secondary production, tertiary and quaternary activities, and international trade.

292 FIELD METHODS IN GEOGRAPHY (3) Introduction to the tools and techniques of field investigation, observation, interviewing, sampling, and data collecting: analysis, recording, and presentation based on original field work is experienced.

312 WEATHER AND CLIMATE (3) Studies and basic concepts of meterology and climatology; causes and consequences of climatic change, both natural and man-induced; weather maps, both surface and upper-level; and selected topics germane to current environmental issues.

321 (GEL) GEOMORPHOLOGY (3) Studies the major theories of how landforms and fluvial systems develop. Some discussion of implications regarding human use of the terrain. Prerequisites: GEG 111 or GEL 121, or permission of instructor.

330 ADVANCED CARTOGRAPHY (4) Class-laboratory experience with the application and utilization of modern tools and techniques of cartography and graphics. Emphasis on map design and reproduction.

350 URBAN GEOGRAPHY (3) Analysis of the localization, structure, and function of urban settlements and their supporting areas.

351 POPULATION GEOGRAPHY (3) Studies the spatial aspects of world population numbers, densities, and qualities; emphasizing the economic and social characteristics and mobility of the world's population.

362 ECONOMIC GEOGRAPHY OF SERVICE AND RETAIL ACTIVITIES (3) Studies the geographic theory and practical implications of consumer service-oriented economic activities.

363 URBAN LAND USE DEVELOPMENT (3) Studies the spatial patterns of urban land use with an emphasis on the theories and practices of real estate development.

364 TECHNIQUES OF GEOGRAPHIC MEASUREMENT (3) An introduction to the methods of geographic measurement, such as data-gathering and statistical-computerized analysis. The course is intended to familiarize students with more advanced methodologies of geographic research.

370 POLITICAL GEOGRAPHY (3) An analysis of the geographical nature, policy, and power of the state. Topics include: the growth and development of states, boundary problems, population distribution, colonies, and political-geographical theories.

371 HISTORICAL GEOGRAPHY (3) The human geography of the past. Topics include: the characteristics of colonization and the resulting cultural landscape. Special reference is made to the historical geography of the United States.

372 (GEL) AERIAL PHOTO INTERPRETATION (3) Studies how to interpret and make accurate measurements from aerial photographs. Emphasizes geologic aspects but covers land-use mapping, crop identification, and other topics. GEG 111 or GEL 121 are recommended as prior courses.

380 GEOGRAPHY OF THE UNITED STATES AND CANADA (3) An analysis of the physical and human aspects of the United States and Canada. Particular emphasis on regionalism and regional problems.

381 GEOGRAPHY OF PENNSYLVANIA (3) Analysis of the regional patterns of Pennsylvania. Topics include: topography, climate, waters resources, mineral resources, and the historical development of economic regions within the State.

390 REGIONAL ANALYSIS OF SELECTED WORLD AREAS (3) Regional study of selected areas, with special emphasis on the area's human and physical characteristics and related, contemporary issues. Students may repeat for different areas.

402 ADVANCED HUMAN GEOGRAPHY (3) A systematic study of the approaches, concepts, and methods of human geography. Emphasis is given to man-environmental systems and the spatial patterns of human behavior within a thematic framework.

412 (GEL) GLACIAL GEOLOGY (3) An analytical study of glaciers and the Pleistocene epoch. The origins and mechanics of glacier motion and the landscape features produced during glaciation will be studied. Causes of ice ages and their distribution through geologic time and the methods of Pleistocene stratigraphy will also be considered. prerequisite: GEL 121.

430 MODERN CARTOGRAPHIC TECHNIQUES (1-3) Advanced elements of map design and reproduction. Emphasis on contemporary media used in presenting quantitative data. The course is organized into 3 modules. The first, "Computer Mapping," should be particularly useful to students from the social and behavioral sciences, and has no prerequisites: The remaining two modules, "Thematic Maps" and "Practicum" require that students have completed GEG 230.

465 (BIO & GEL) SEMINAR IN ENVIRONMENTAL SCIENCE (1) An upperlevel seminar that integrates and applies concepts and skills taught in the basic courses of the Environmental Science emphasis.

470 WORLD PROBLEMS IN GEOGRAPHY (1-2) Regional treatment of man-land environmental problems approached from various geographical points-of-view.

496 INTERNSHIP (3-12) Offers practical work experience and the opportunity to apply and further develop skills taught in the Geography Department. Prerequisite: permission of instructor.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

498 SENIOR SEMINAR (3) The history and philosophy of modern academic geography. Prerequisite: geography major with junior or senior class standing.

499 HONORS COURSE (3) A prerequisite of 18 hours in upper-level geography with at least a B average. The course is designed for upper-division students who can qualify for independent research which will be conducted under the direction and supervision of a designed faculty member of the department.

GEOLOGY (GEL)

101 EARTH RESOURCES AND ENERGY (3) This course deals with our natural resources, metallic, non-metallic and fossil fuels. Points include the worldwide abundance and distribution of the resources and the economics of the extractive industries. The fossil fuels, of finite supply, lead in to alternative sources of energy and their feasibility. 3 Lect.

102 ENVIRONMENTAL GEOLOGY (3) The relationship of man to his environment will be examined with particular emphasis to problems of natural hazards (earthquakes, flooding, landslides), construction, ground water management, resources, utilization, impact mitigation and geological planning. 3 Lect.

121 PHYSICAL GEOLOGY (3) A study of the solid portion of the earth, the materials of which it is composed and the processes which are acting on it. Included are such topics as rocks and minerals, weathering and geologic structure. 2 Lect., 2 Lab.

122 HISTORICAL GEOLOGY (3) A study of earth history using the principles of GEL 121. This includes theories of earth origin, fossils, geologic time and the various techniques used to unravel geologic history. 2 Lect., 2 Lab.

232 MINERALOGY (3) A detailed study of minerals emphasizing their composition, origin, mode of occurrence, alteration, classification and identification. Prerequisite: one year of college chemistry, which may be taken concurrently. 2 Lect., 2 Lab.

251 PALEONTOLOGY (3) A detailed study of the fossil remains of animals. Special emphasis is given to the methods of studying fossils, the structures by which the fossils are identified, similarities of fossils to living organisms, and the significance of fossils. 2 Lect., 2 Lab.

321 (GEG) GEOMORPHOLOGY (3) Studies major theories of how landforms and fluvial systems develop. Some discussion of implications regarding man's use of the terrain. Prerequisite: GEG 111 or GEL 121 or permission of instructor.

351 STRUCTURAL GEOLOGY (3) The analysis of geologic structures and their casual mechanism is approached through applied physics and mathematics. Understanding of the simple geologic structures leads into the worldwide tectonic pattern and the concept of plate tectonics. Prerequisite: permission of instructor.

352 STRATIGRAPHY (3) An extensive study of the genesis and distribution of the sedimentary rocks and the reconstruction of the paleo-environment. Sedimentary processes and environments of deposition will be studied through detailed analysis of reference sections using the principals of correlation, facies change, tectonics, and paleontology. Prerequisite: permission of instructor. 2 Lect., 2 Lab.

361 SEDIMENTATION (3) An introduction to the analysis of sediments and sedimentary rocks, their classification, erosion, transportation and deposition. Paleonenvironmental analyses are made.

371 PETROLOGY (3) A rigorous course in the identification of igneous, sedimentary and metamorphic rocks both in hand specimens and microscopically. The spatial and temporal distribution of the various rock types is related to plate tectonic theory.

372 (GEG) AERIAL PHOTO INTERPRETATION (3) Studies how to interpret and make accurate measurements from aerial photographs. Emphasizes geologic aspects but covers land use mapping, crop identification and other topics. Geography 111 or Geology 121 are recommended as prior courses.

401 FIELD TECHNIQUES IN GEOLOGY (3) A field oriented course where the student learns actual data collection methods. Methods vary with the problem, but include planning field work, identifying and measuring all parameters of the outcrop and sampling techniques. Different surveying methods are used in locating outcrops. Interpretation of the field data is an integral part of the course. 1 Lect., 4 Lab.

412 (GEG) GLACIAL GEOLOGY (3) An analytical study of glaciers and the Pleistocene epoch. The origins and mechanics of glacier motion and the landscape features produced during glaciation will be studied. Causes of ice ages and their distribution through geologic time and the methods of Pleistocene stratigraphy will also be considered. Prerequisite: GEL 121.

421 PETROLEUM GEOLOGY (3) An introduction to the origin, migration and accumulation of petroleum; reservoir rocks and traps; methods of exploration, evaluation and extraction.

451 PALEOECOLOGY (3) An introduction to interpretation of past environments of deposition through analysis of fossil organisms, their distribution and relation to sediments.

465 (BIO & GEG) SEMINAR IN ENVIRONMENTAL SCIENCE (1) An upperlevel seminar that integrates and applies concepts and skills taught in the basic courses of the Environmental Science emphasis.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

GERMAN (GER)

101 INTRODUCTORY GERMAN I (3) Elements of structure, reading and writing, intensive drill in pronunciation, aural comprehension and speaking. Language laboratory attendance is required twice weekly.

102 INTRODUCTORY GERMAN II (3) Continuation of GER 101. Prerequisite: GER 101 or equivalent competency. Language laboratory is required twice weekly.

201 INTERMEDIATE GERMAN I (3) A review of the structure of the German language with additional emphasis on listening comprehension, speaking, reading and writing. Prerequisite: German 102 or equivalent competency. Language lab attendance required twice weekly.

202 INTERMEDIATE GERMAN II (3) Continuation of GER 201. Increased emphasis on the development of the four language skills, using materials taken from actual cultural and literary selections. Prerequisite: GER 201 or equivalent competency. Language laboratory required twice weekly.

205 PHONETICS AND PRONUNCIATION (1) A study of German phonetics, phonemics, pronunciation, intonation and rhythm. The theory of the speech and articulatory mechanisms will be studied; extensive practice exercises. Prerequisite: GER 102 or equivalent.

300 CONVERSATIONAL GERMAN & CIVILIZATION (3) Intensive oral practice in German for the development of a higher degree of fluency in the spoken language. Emphasis on topics of cultural, social, economic, geographic, economic and political nature. Upon recommendation of instructor, may be taken concurrently with GER 202. Prerequisite: GER 202 or equivalent competency. 300 or 305 required by all German majors. May be repeated for credit one time.

305 ADVANCED GERMAN CONVERSATION (3) Intensive development of oral expression for students desiring a higher level of oral fluency. Emphasis is on enabling the student to carry on discussion in more detail and giving oral reports. Prerequisite: GER 202 or equivalent competency.

320 ADVANCED GERMAN STRUCTURE (3) Study and practical application of the German structural patterns with concentration on the morphology and syntax of the language. Prerequisite: GER 202 or equivalent competency. Required of all German majors.

321 COMPOSITION AND STYLISTICS (3) Development of self-expression in the written skill. Emphasis is on synonomic development of expression and stylistic writing. Frequent written assignments and at least one significant written assignment of a critical nature. Intended for all German majors, especially those who wish to teach or pursue graduate work. Prerequisites: Completion of GER 202 (or equivalent preparation) and recommendation of the instructor.

330 SURVEY OF GERMAN LITERATURE I (3) Designed to acquaint the student with the major literary movements and representative writers of German literature from 1750. Prerequisites: GER 202, or equivalent competency. Required of all German majors.

331 SURVEY OF GERMAN LITERATURE II (3) Sequel to GER 330. A cross section of literary movements and significant writers from the earliest periods through 1750. Prerequisites: GER 202, or equivalent competency; GER 330 is also recommended as a prerequisite. Required of all German majors.

335-341 PROSEMINAR (3) Selected topics form the following list, or other topics upon arrangement. Prerequisites: GER 202 or equivalent competency. May be repeated for credit (with a different topic). TOPICS: 1) Geographic, economic, technical, scientific and industrial aspects of the German speaking lands; 2) The educational system, social structures, communications systems and mass media, transportation systems, etc.; 3) Art, music, legends and folklore of the German-speaking countries; 4) The states and major cities of the German-speaking world and their significant character and cultural contributions; 5) German literature of the 20th century; 6) German literature of the 19th century.

360-366 SEMINAR (3) Selected topics from the following list, or other topics upon arrangement. Prerequisites: GER 202, or equivalent competency; junior standing or above preferred. May be repeated with a different topic for credit. TOPICS: 1) Historic and political structures, religion and philosophy in the German-speaking lands; 2) German cultural history; 3) German literature of the 18th century; 4) German lyric poetry; 5) The German novel; 6) The "Novelle"; 7) German Drama.

370-380 FOREIGN STUDY (CREDIT ARRANGED) Open to students who wish to study German abroad. (Consult the Office of the Provost and Vice President for Academic Affairs for details on procedures). Plans for foreign study should be presented at least two semesters in advance of departure. The number of credits granted will be based upon validated credentials presented to the department. Recommended for all German majors.

400 SENIOR SEMINAR (3) Selected topics from the following list, or other topics upon arrangement. Open to qualified students of senior standing (junior standing by permission of the instructor). May be repeated for credit with a different topic. TOPICS: Heinrich Boll, Bertolt Brecht, Heinrich Heine, Friedrick Durrenmatt, Johann Wolfgang von Goethe, Friedrich von Schiller, Gunter Grass, Max Frisch and Hermann Hesse.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

HEALTH AND PHYSICAL EDUCATION (HPE)

100 HEALTH (PERSONAL AND COMMUNITY) (2) Includes health services, health instruction and health environment dealing with contemporary principles, practices and concepts serving personal, family and community health.

101-151 PHYSICAL EDUCATION (1) Serves the individuals with little or no experience in the activity selected. Emphasis on beginner level fundamental skills in season activities for individual, dual and team sports.

203 PHYSICAL EDUCATION (1) Serves the individual with prior experience in the activity selected. Skills are evaluated and on advanced skills and strategies utilized in activities for individual, dual and team sports.

205 INTERCOLLEGIATE ATHLETICS (1) Course is designed as an upper level skill class available only to individuals on varsity teams.

206 ATHLETIC TRAINING LAB I (1) As in depth examination of the organization and administration of athletic training for the student seeking NATA certification. Clinical hours will be required to meet NATA standards. Prerequisites: athletic training area of concentrations, two semesters of experience as a student trainer.

207 ATHLETIC TRAINING LAB II (1) The course will examine all of the major muscles and the procedure for testing for injury to those muscles. Clinical work under the direct supervision of a licensed NATA Certified Trainer is part of requirement. Prerequisite: HPE 206.

225 WATER SAFETY INSTRUCTION (2) The course will prepare students with the knowledge and practical experience in teaching swimming from the non-swimmer level to advanced senior life saving. Prerequisite: successful completion of HPE 203, Advanced Life Saving. 1 Lect., 2 Lab.

300 TECHNIQUES OF COACHING TRACK AND FIELD (3) The participation in actual training techniques in track and field. Planning, organizing equipment for a track program will be studied.

305 COACHING AND OFFICIATING WRESTLING (3) Practical training in the areas of wrestling fundamentals, strategy and the psychology of coaching, and fundamentals of officiating, rule interpretation and preparation.

310 SPECIAL PHYSICAL EDUCATION FOR THE EXCEPTIONAL CHILD (3) A comprehensive analysis of the physically, emotionally, and socially handicapped student. Includes selected activities and achievement standards in the field of health, physical education and athletics.

315 ATHLETIC TRAINING (3) A course designed to provide experiences in application of various methods in treatment of athletic injuries. A study of preventive measures and medical management of athletic injuries. 3 Lect.

320 BASIC FOOTBALL (3) The purpose of the course is to teach the methods, techniques and psychology used in coaching football, to give the prospective coach a knowledge of the personal problems in motivating and handling individual players. 1 Lect., 1 Recitation, 2 Lab.

330 COACHING BASKETBALL (3) Practical training in the areas of basketball fundamentals, individual and team play, strategy and the psychology of coaching. 1 Lect., 1 Recitation, 2 Lab.

340 FIRST AID AND CPR (STANDARD AND ADVANCED) (3) Theory and application of the methods, techniques and psychology used in first aid and safety. Basic, multi-media, SFAPS and CPR certification included. 1 Lect., 1 Recit., 2 Lab.

341 ADVANCED FIRST AID AND CPR RECERTIFICATION (3) To provide advanced skills and knowledge when responding to first aid situations: to certify instructors where there is a need for basic first aid, multi-media first aid, and standard first aid and personal safety; to recertify current first aiders.

350 METHODS I, TEACHING HEALTH AND PHYSICAL EDUCATION IN ELEMENTARY SCHOOL (2) Principles, problems, materials and techniques for conducting the health and physical education programs in the elementary schools.

360 KINESIOLOGY (3) Analysis of human motion based on anatomical and mechanical principles. Applications of mechanics to sports activity. Prerequisites: BIO 331 and 332.

370 PHYSIOLOGY OF EXERCISE (3) Critical analysis of physiological bases of muscular activity with special attention to general effects on exercise on body function. Prerequisites: BIO 331, 332, HPE 360.

375 ADVANCED ATHLETIC TRAINING (3) An in-depth study of detailed orthopedic evaluation of injuries to athletes. Rehabilitation of specific major joints from post-op to competition will be studied. Prerequisites: HPE 206, 207, 315. 2 Lect. 2 Lab.

376 ATHLETIC TRAINING LAB III (1) Examines the therapeutic modalities commonly used in the field of athletic training. Students in the area of concentration will be required to perform clinical work under the direct supervision of a licensed NATA certified athletic trainer. Prerequisites: HPE 206, 207.

377 ATHLETIC TRAINING LAB IV (1) The use and misuse of prescription and non-prescription medication in athletics today. The student will be required to perform clinical work under the direct supervision of a licensed NATA certified athletic trainer. Prerequisite: HPE 376

390 COACHING BASEBALL (3) Provide students the knowledge, skills and attitudes to prepare them to coach high school baseball programs dealing with organization factors of coaching as well as the strategies and skills of the game.

420 HUMAN BEHAVIOR IN COACHING (3) Designed for the experienced coach as well as the future coach to acquire a better understanding of the most important and least understood aspect of athletics. The course includes appropriate techniques to teach athletics to consciously affect motivational processes.

HISTORY (HST)

101 WESTERN CIVILIZATION I (3) A survey of significant ideas, events, and cultural developments in Western history from the emergence of ancient civilization to early modern times. (Circa 1660)

102 WESTERN CIVILIZATION II (3) A continuation of History 101. From early modern times to the present.

104 THE WORLD IN THE TWENTIETH CENTURY (3) A study of the forces and concepts operating in the modern world with emphasis on the trouble spots at the present time. For non-history majors only.

201 AMERICAN HISTORY THROUGH THE CIVIL WAR (3) A survey of American history covering the 17th century colonization; independence and formation of the federal union; nationalism, sectionalism and growth of democracy in the 19th century; and the Civil War.

202 AMERICAN HISTORY - RECONSTRUCTION TO THE PRESENT (3) A continuation of HST 201, covering significant trends and events in the rise of modern industrial America and its emergence as a world power.

205 HISTORY OF SPORTS IN AMERICAN SOCIETY (3) Topics include: evolution of major sports, influence of organization and technology, critics of sports, racism, a comparison with sports in other countries, the role of women and labor relations within sports, sports in the school, and various sports heroes.

210 HERSTORY: THE AMERICAN SIDE OF WOMEN'S PAST (3) Life stories, experiences, and thoughts of American women 1607-present. Themes are the changing expectations of women and men in society, women in the labor force, and the equal rights movement.

220 WORLD WAR II (3) The origin, background and course of World War II and its effects upon world affairs. Course deals with battles and the scientific, psychological, political and economic impact of the war.

225 INTRO TO AMERICAN MILITARY HISTORY (3) Traces the American military experience from its European origins to the present time. The evolution of U.S. military history is examined along institutional and operational lines with emphasis on land warfare. Selected lessons complement this focus by showing developments in naval and air warfare, and by examining major trends in European military history.

232 AZTECS, INCAS, MAYAS (3) A study of the achievements, values, and organization of three Indian societies before the arrival of Columbus. Covers a number of multi-disciplinary topics including the nature of societal evolution, the benefits of alternative systems of government and justice, the purpose of polytheistic religions, and the reasons for the decline of a civilization.

240 MAKERS OF HISTORY (1-3) The study of history through biography emphasizing historical figures who have influenced the course of events as well as on how events have shaped them. Examples are Hitler, Stalin, Churchill, Erasmus, Luther, St. Ignatius, Ghandi, Mao, Ho Chi Minh.

***250 EAST EUROPEAN HISTORY (3)** East European cultures, peoples, and states, with emphasis on the rise and development of national consciousness (1800-1950)

***260 HISTORY OF CRIMINAL JUSTICE (3)** The evolution of crime and criminal justice systems in the ancient world, England, and primarily, the United States.

288 EASTERN RELIGIONS (3) Major religions of Asia - Islam, Buddhism, Hinduism, and Confucianism, the basic beliefs, duties and effect of these religions on Asian culture.

295 TOPICS IN HISTORY (1-3) A special area that is of current interest.

300 HISTORIOGRAPHY (3) Introduces the student to the discipline, methods and techniques of historical research and writing and also the major interpretations of history and historiographical writings. Required of all history majors in the junior year.

301 HISTORY OF COLONIAL AMERICA TO 1788 (3) The exploration and settlement of North America with emphasis on the English colonies and their political, social and economic developments.

302 CONSTITUTION TO MANIFEST DESTINY (1789-1850) (3) The movement for American independence and events during the Revolutionary War and early national period.

304 HISTORY OF THE CIVIL WAR AND RECONSTRUCTION (3) Sectional controversy; constitutional issues, secession and military conflict; the aftermath of the war, North and South, with emphasis on political development during reconstruction ending.

306 AMERICA BETWEEN THE WARS (3) American politics, diplomacy and society in World War I, the nervous Twenties, the Depression Decade, and World War II.

307 CONTEMPORARY AMERICA (3) American political, diplomatic and social developments in the Atomic Era. Watergate, Vietnam and Civil Rights are key points studied.

310 AFRO-AMERICAN EXPERIENCE (3) African heritage, Atlantic slave trade, American slavery, Civil War and Reconstruction, segregation and disfranchisement, the Harlem Renaissance, and Black Revolution, black resistance and the quest for a black identity.

315 (SWK) HISTORY OF SOCIAL WELFARE IN AMERICA (3) The development of the public welfare systems as a mirror reflecting Americans' changing attitudes toward misfortune and relief. Centers upon a central issue of historical evaluation and contemporary policy: the appropriate balance between assistance-security and work-independence objectives in public welfare efforts.

***340 THE ANCIENT WORLD (3)** Growth and development of cultural, social and intellectual foundations that formed the basis of our present institutions. Classical life and thought will be analyzed through a study of the great civilizations of Greece and Rome.

345 MIDDLE AGES: LIFE AND STYLE (3) The political, socioeconomic and cultural development of the civilization of Medieval Europe from the fall of Rome to the Medieval synthesis in the High Middle Ages.

346 RENAISSANCE AND REFORMATION (3) Political, social, economic and cultural forces involved in the transition from Medieval western society with attention to the rise of national states and the growth of individualism. Reformation is highlighted.

351 RISE OF MODERN ENGLAND (3) A survey of the social, political, economic and constitutional themes that have shaped modern England since 1688.

359 RUSSIA: BEGINNING TO 1917 (3) Russian historiography, nature and development of the Russian Empire from the time of Peter I to the Revolution of 1917. Compares development of Russia with states and examines the roots underlying the modern Soviet state.

***361 BEGINNINGS OF MODERN EUROPE (3)** European states in the sixteenth, seventeenth, and eighteenth centuries with a focus on domestic and international developments.

364-365 EUROPE IN THE TWENTIETH CENTURY (3) Political, economic, and cultural developments in Europe in the twentieth century; attention is given to the factors involved in the two World Wars and their global impact and significance. First semester, 1914-1939, second semester, World War II and its aftermath.

***375 COLONIAL LATIN AMERICA (3)** Colonial era focusing on preColumbian civilizations, the conquerors, the creation of Spanish and Portuguese institutions for mastery of a multi-racial society, the reforms of the 18th century and the independence struggles.

***376 MODERN LATIN AMERICA (3)** A modern period emphasizing the difficulty in creating a national self-identity, the impact of liberal and conservative philosophies on the 19th century, and the viability of revolutionary vs. non-revolutionary approaches to the problems of 20th century Latin America.

385 HISTORY OF THE MIDDLE EAST (3) The major political, economic and cultural features of the Middle East with particular emphasis on modern colonialism in the area, Zionism, and the Arab States' contemporary relations with other nations.

386 HISTORY OF SOUTHEAST ASIA (3) Peoples and states of Southeast Asia, Burma, Thailand, Cambodia, Laos, Vietnam, Malaysia, Indonesia, and the Philippines. Portuguese impact in the 16th century to the influence of the United States in the 20th century. Age of imperialism, colonialism, nationalism, and independence.

387 HISTORY OF THE FAR EAST (3) Traditional cultures and institutions of China and its role in Korea and Southeast Asia; the role of Western powers in China's development; post-war changes; United States foreign policy in relation to the Far East; and the emergency of Communist China.

401 HISTORY OF PENNSYLVANIA (3) Founding and development of Pennsylvania, emphasizing the social, political, and economic characteristics of the Commonwealth; the diversity of its people; local and family history is an important aspect.

406 THE WESTWARD MOVEMENT IN AMERICA (3) Settlement of the geographic areas and the influence of westward expansions on the political, social and economic development of the American people. Includes the trans-mississippi West and role of the Plains Indian in American history.

***420 THE TEACHING OF HISTORY IN THE SECONDARY SCHOOLS (3)** Students in this course are involved in the creation of a teaching unit directly transferable to the secondary teaching situation. Research and organize content material and develop appropriate teaching approaches. Topics appropriate for study in secondary units or mini-courses will be developed.

430 THE AMERICAN INDIAN: FROM BERING TO RED POWER (3) Origins, culture and history of the American Indian. The development of Indian policy by colonial rulers and United States is studied and compared. Problems of assimilation and cultural conflict resulting from removal as well as modern Indian problems.

444 INTRODUCTION TO HISTORICAL MUSEUMS, PRESERVATION AND SOCIETIES (3) Provides broad background regarding museum work, historical societies and their function, and historical preservation. Prepares students for internships and potential careers in the field of museology and preservation.

450 INTERNSHIP (3-12) Provides pre-professional skills. Museum and archival work are examples of areas in which students can bring together academic training and practical experience. As a prerequisite the student needs the consent of a sponsoring member of the history department, the chairman and an agency.

451 FRANCE: FROM THE REVOLUTION TO THE PRESENT (3) Social, political, economic and constitutional themes that have shaped modern France since 1789.

***454 MODERN GERMANY (3)** Forces of German unity since the rise of Brandenburg-Prussia with emphasis on the influence of Frederick the Great, the Bismarckian accomplishment of 1870 and Imperial, Weimar and Nazi Germany.

458 THE SOVIET UNION (3) Bolshevik Revolution and the founding of the Soviet Union: emphasis is on the internal and external factors involved in world communism and Soviet power politics.

***470 HISTORY OF MEXICO (3)** Pre-Columbian civilizations to the present. Interaction of various racial groups, the formation of a distinct Mexican national identity and class conflicts.

496 SEMINARS ON SELECTED TOPICS (3) Open to history majors in the senior year. In depth knowledge of historical methodology and research. Significant historical problems are selected for oral discussion.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

* Will be offered when there is sufficient student interest.

HOME ECONOMICS (HEC)

100 HOME ECONOMICS ORIENTATION (1) Survey of home economics history, philosophy and professional orientation. Explores career opportunities.

101 CLOTHING AND MAN (3) Studies the cultural, social, psychological, physical, economic, scientific, and aesthetic relationships that influence clothing decisions.

102 FUNDAMENTALS OF FASHION (2) Analyzes and sketches fashion design in couture and ready-to wear clothing. Studies principles related to fashion and display. Create designs for individual figure types. Surveys the fashion industry.

111 INTRODUCTION TO NUTRITION (3) Introduces the science of nutrition, the nutrient needs of the body and the foods that meet these needs.

121 PERSONAL AND FAMILY MANAGEMENT (2) Management of human, economic and environmental resources as related to human needs, values, and goals. Exploration of decision-making, life styles, roles, and aspirations of family members.

131 INTRODUCTION TO CHILD AND FAMILY (2) Introduces the student to human development and family studies as an academic discipline. Emphasizes stages of development throughout the life cycle.

201 FUNDAMENTALS OF CLOTHING CONSTRUCTION (3) Introduces pattern and fabric selection, construction techniques, and methods of fitting garments. 1 Lect., 4 Lab.

207 FASHION MERCHANDISING (3) Surveys buying and selling activities in fashion merchandising. Includes all aspects of planning, selecting, promoting, and evaluating merchandise of the fashion retailer.

210 SOCIAL USAGE (1) Surveys contemporary influences on accepted standards of conduct in professional situations.

215 PRINCIPLES OF FOOD (3) Applies physical and chemical principles as related to the selection, preparation, and preservation of food. 1 Lect., 4 Lab.

216 FOOD FOR THE FAMILY (3) Consumer education in food production, supply, marketing and budgeting; laboratory experience in planning, preparation, service and evaluation of meals. Prerequisites: HEC 111 and 215 or permission of the instructor. 1 Lect., 4 Lab.

224 HOUSEHOLD EQUIPMENT (2) Selection, use, care and testing and evaluation of household appliances and equipment. 1 Lect., 2 Lab.

231 FIRST YEARS OF CHILDHOOD (3) Studies the child from conception to age 5. Emphasizes social, emotional, physical, psychomotor and intellectual growth and development. Includes observation and participation in the campus Head Start facility. 2 Lect., 2 Lab.

232 THE AMERICAN FAMILY (3) Studies courtship patterns, marital interaction, and nuclear and expanded family relationships in contemporary America. Emphasizes past and current trends in marriage and family life and in family studies as an academic discipline.

301 INTERMEDIATE CLOTHING (3) Emphasizes construction techniques related to fabrics and fit. Introduces speed tailoring techniques. 1 Lect., 4 Lab.

302 APPAREL DESIGN ANALYSIS (3) Opportunity is provided for the analysis of the concepts and principles of design and color as applied to apparel. Analysis of ready-to-wear lines, specific human needs, and in depth study of designers and their designs. Prerequisite: HEC 102.

303 TAILORING (3) Emphasizes the difference between custom and speed tailoring, the selection of tailoring fabrics and their relationship to design. Prerequisite: HEC 201. 1 Lect., 4 Lab.

304 CLOTHING PRODUCTION, DISTRIBUTION AND CONSUMPTION (3) Studies the clothing field as an economic force. Analyzes fashion trends and their effect on production and distribution in manufacturing as these affect the consumer.

305 STRUCTURES AND PROPERTIES OF FIBERS (2) Studies the chemical and physical structures of fibers and the resulting properties. Prerequisite: CHEM 102.

310 (TRT 410) INTRODUCTION TO THE HOSPITALITY INDUSTRY (3) A survey of the food and lodging industry in terms of functions, terminology, and issues. Evaluation of food and lodging facilities. An introduction to management thought and its application to the hospitality industry.

314 NUTRITION THROUGHOUT THE LIFE CYCLE (3) A study of nutritional requirements and issues as they pertain to fetal development, infancy, childhood, adolescence, pregnancy and the adult years.

315 FOOD SERVICE ORGANIZATION AND MANAGEMENT (3) Management functions in the food service industry. Methods, procedures and techniques in dealing with personnel. Prerequisites: junior status or permission of instructor.

321 CONSUMER ECONOMICS (3) Introduction to the consumer's role in American society. Course focus is on individual decision making and the knowledge necessary for best achieving satisfaction based on personal goals and value system. The course features tactics and techniques for consumer survival.

323 INTERIOR ENVIRONMENT (3) Emphasizes housing in relation to individuals and families. Studies current housing trends, governmental influences, housing alternatives, design, interiors and energy factors. Housing related laboratory projects focus on development of skills for professional and personal use. 2 Lect., 2 Lab.

330 CHILD AND FAMILY AGENCIES (3) Familiarizes the student with various agencies and programs that serve children and families. A one day observation experience is provided.

332 THE ADOLESCENT (3) Studies adolescents and their development in relation to personality, family, education, and the social order. Emphasizes physiological, sociological, and psychological characteristics and needs. Examines selected current issues.

333 PARENT-CHILD STUDY (3) Focuses on the development of the parent-child relationship. Discusses issues pertaining to the couple's decision to parent, adapting to parenthood, and parental-child interaction. Introduces the student to programs to enhance parenting and the child's development. Includes observation and participation experiences. 2 Lect., 2 Lab.

334 CONTEMPORARY ISSUES IN FAMILY STUDIES (3) Examines current issues and trends under debate in the field of family studies. Emphasizes both theoretical and practical concerns of those studying and serving families. Utilizes seminar format including student presentations of library research.

335 PLAY AND CREATIVE ACTIVITIES IN CHILDHOOD (3) Emphasizes contributions of play and creative activities in physical, emotional, social, and intellectual development. Provides the opportunity to exercise ingenuity to devise play and creative activities in a variety of situations. 1 Lect., 1 Recit., 1 Lab.

336 ADULTHOOD AND AGING (3) Studies adult development from end of adolescence until death. Emphasizes normal aging and potential stresses associated with the aging process. Considers aging within the family and the larger social context. Introduces the student to programs and services to the elderly adult. Provides an opportunity for observation and participation.

390 OBSERVATION AND PARTICIPATION IN EDUCATIONAL SETTINGS (3) Application of concepts and techniques learned in HEC 391 while observing and participating in a variety of teaching learning situations including: nursery and elementary schools, day care centers, programs for the elderly, co-operative extension programs, and classes for students with special needs. Prerequisite: HEC 391 or by permission of instructor. 2 Lect., 2 Lab.

391 TEACHING OF HOME ECONOMICS I (3) The first course in the home economics education sequence. Primary focus is planning for the teaching of home economics content areas. Emphasizes methods, techniques and use of resources for teaching. Simulation and micro-teaching are utilized for implementation of lesson planning.

392 TEACHING OF HOME ECONOMICS II (3) Emphasizes philosophical basis for program and curriculum development for home economics program. Includes selection of learning experiences and resource materials relevant to unit and lesson planning. Provides for development of personal teaching philosophy and style of teaching. Studies current legislation and family issues. Discipline and evaluation. Prerequisites: HEC 390 and 391.

400 STUDENT TEACHING (12) Opportunity to apply knowledge and skills acquired in professional preparation. Accomplished by a field experience in University-established centers under supervision of certified cooperating teachers. Observations and conferences are scheduled by the University supervisor. Required for all Home Economics majors seeking certification to teach.

403 FLAT PATTERN DESIGN (3) Using flat pattern methods to create new patterns and alter commercial patterns. Applies principles of fit. Prerequisite: HEC 201. 1 Lect., 4 Lab.

404 CREATIVE DRAPING (3) Creates designs for the individual using basic techniques, varies basic designs and creates original designs. Prerequisite: HEC 201. 1 Lect., 4 Lab.

405 FABRICS AND FINISHES (3) Relationship of fiber structure, fabric structure and finishing processes to fabric performance. Laboratory evaluation of performance characteristics of textile products. Prerequisite: HEC 305, 2 Lect., 2 Lab.

409 SEMINAR AND FIELD EXPERIENCE IN CLOTHING (4) Preparation for an experience in cooperative program with textiles, apparel, or retail businesses. Prerequisites: HEC 302, 303, 304; or by permission of instructor. 1 Lect., 6 lab.

410 DIET THERAPY (3) The study of dietary adaptation to accomodate physiologic changes which accompany disease states.

411 QUANTITY FOOD PRODUCTION (4) Quantity food production, menu planning, purchasing, sanitation techniques in food service. Laboratory experience in quantity food production. Prerequisite: senior status or permission of instructor.

412 INSTITUTIONAL EQUIPMENT (2) Study of the function, use and care of equipment used in food service. Layout and design of food service operation. Prerequisites: senior status or permission of instructor.

416 PRESENTATION TECHNIQUES IN HOME ECONOMICS (2) Emphasizes techniques of communication for the home economist in business. Evaluation of professional presentations and student presentations. Junior standing. 4 Lab.

417 SURVEY OF NUTRITION (3) Chemistry of nutrients, metabolism and normal nutritional requirements throughout the human life cycle. Current research, food fads and fallacies and consumer protection are highlighted. Prerequisites: eight semester hours of chemistry, three semester hours in foods. HEC 111.

418 ADVANCED FOODS (3) An extension of the principles of food preparation, incorporating an experimental approach to preparation problems. The selection and service of food for different occasions, considering the aesthetic, cultural and social significance of food. Prerequisites: HEC 215 and 216. 1 Lect., 4 Lab.

419 INTERNSHIP: DIETETICS (3) An approved practicum following the junior year in dietetics. Students are employed or volunteer in a hospital or food service operation. Students present a written description and an oral presentation of their experience. Equivalent of 6 week

421 HOUSEHOLD EQUIPMENT AND HOME MANAGEMENT (3) Provides for in-depth study of household equipment including experiments testing equipment features. Studies theories and processes necessary to management of the home. 2 Lect., 2 Lab.

423 INTERIOR DESIGN IN THE HOME (3) Emphasizes principles of design and elements of art in relation to home interiors, environment, personal taste and personality. Laboratory experiences include planning and developing interior designs using professional techniques. Related skill projects are required. Available to all students. 2 Lect., 2 Lab.

424 THE HANDICAPPED HOMEMAKER (3) Identification and analysis of various handicaps which influence ability to manage daily life tasks. Exploration of techniques for work, storage and organization to achieve more independent living.

425 PERSONAL AND FAMILY FINANCIAL MANAGEMENT (3) A course covering financial planning for individuals and families over a lifetime which includes money management techniques useful in accomplishing one's personal and family financial goals. Prerequisite: HEC 321 or consent of instructor.

426 FAMILY FINANCIAL COUNSELING (3) Focuces upon family financial problems and the participation of professionals in their solution. Financial counseling techniques applied in case study and real life situations. Methods of rehabilitative and long-term financial planning included.

429 INTERNSHIP: FOOD SERVICE MANAGEMENT (3) An approved practicum in the student's area of interest in the field of food service management following the junior year.

435 TEACHING IN THE PRESCHOOL (3) Offers directed work in selected preschool settings with opportunities to apply principles of guiding children in preschool groups. Covers principles of preschool group management including: management of space, equipment, and supplies; planning; funding and regulations; working with parents and community. Prerequisite: HEC 231 or permission of the instructor.

436 PREPROFESSIONAL SEMINAR (2) Primary focus is on the integration of theory and practice in basic helping skills. Includes participation in community organizations. Prerequisite: senior standing.

437 ADVANCED CHILD DEVELOPMENT (3) Studies development of the child from prenatal to adolescence. Emphasizes current research and theory. Prerequisites: HEC 231, HEC 333, or by permission of instructor.

438 ADVANCED FAMILY RELATIONSHIPS (3) Explores internal functioning of family life including theoretical considerations and the impacts of the larger society on family dynamics. Considers policy issues and the amelioration of family problems.

439 INTERNSHIP: CHILD AND FAMILY SERVICES (12) The student participates in a supervised twelve to fifteen week field placement with a community agency appropriate to the student's professional interests. Examples of agencies and programs utilized include early childhood and day care, general social services, children's services, family planning, county extension, adolescent programs, and gerontological services. Prerequisite: senior standing.

485 (ED) TEACHING OF ADULTS (3) Students will identify characteristics and needs of various adult groups and explore lifelong learning as a phenomenon. Includes development of tactics for recruiting, teaching and evaluating adult students.

494 VOCATIONAL AND CAREER EDUCATION (3) Focuses on home economics related to vocational education and career education. Identifies federal and state vocational education. Examines employment opportunities provided for secondary home economics students through vocational programs.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

HONORS (HON)

100 HUMANITIES HONORS I (3) Introduction to the humanities by means of an interdisciplinary content drawn from literature, philosophy, theatre, music, art, and history.

101 HUMANITIES HONORS II (3) Continuation of HON 100.

201 SOCIAL SCIENCE HONORS (3) Introduces the student to the nature of scientific thought as this is applied in the social sciences. The world view common to the social sciences or the particular methodology of one of the basic social sciences will be examined. (Note that this course may be offered separately, or HON 201 may be applied as a cross listing to another course upon recommendation of the Honors Council.)

497 SENIOR PROJECT (INDEPENDENT STUDY) (1-3) Completes the Honors Program by requiring the student to carry out a full length project in the area of his/her major, involving also the perspective of at least one other academic discipline. The project is supervised by a professor chosen by the student in collaboration with the Honors director. The project may be of a research experimental, or performance nature. The project will be geared towards a formal presentation of its results to the students and faculty of the Honors Program.

INTERDISCIPLINARY STUDIES (ID)

201 INTERDISCIPLINARY STUDIES (3) Topics to be offered will vary. Studies involving more than one department or discipline shall be offered; course may be applied to meet the five areas of the general education requirements, and with departmental approval may be applied to the major. Specific topics will be announced each semester prior to registration; consult such announcements for meeting hours, prerequisites, and other details.

201 ENGLAND STUDY TOUR (3) Opportunity to travel in Great Britain and live with families. Proposed programs and homestays to promote understanding, tolerance, and respect arranged through International Contact, London. Interdisciplinary seminar course open to all matriculating students as well as area residents. Humanities, social science, or home economics elective credit.

499 INTERDISCIPLINARY SEMINAR IN EARLY CHILDHOOD EDUCATION (2) Interdisciplinary study of issues, problems, literature, and research base for early childhood education programs. Focus will be on principles and practical procedures for delivery of effective early childhood education in a variety of settings in elementary education, home economics and special education.

JOURNALISM (JN)

100 JOURNALISM (3) Fundamentals of reporting, editing, and writing feature articles. Emphasis on news gathering, news evaluation, and style and structures of news stories. Fall.

200 CRISIS REPORTING (3) Critical examination of the way major current issues are handled by the various media. Practice in writing, investigating and interviewing. Prerequisite: JN 100.

210 MEDIA DESIGN (3) Studies the principles of newspapers, magazine, book and television design. Practice in designing pages for the print media and in writing copy for programs for the electronic media. Spring. Prerequisite: JN 100.

249 CRIMINAL JUSTICE AND THE PRESS (3) Instruction in reporting police news. Emphasis will be given to the examination and evaluation of the contrasting viewpoints of reports, law enforcement officials, and the accused in the development and content of news stories. Prerequisites: CJA 100; PSC 101.

310 INTERPRETATIVE JOURNALISM (3) Examines the content, style and techniques of contemporary interpretative news reporting propaganda, ethics, and editorial columns. Practice in writing interpretative articles. Prerequisite: JN 100

320 CREATIVE JOURNALISM (3) Introduces the theory and practice of the New Journalism. Students will explore the culture and resources of the region, gathering materials for publishable articles. Prerequisite: JN 100.

330 PRESS PERFORMANCE (3) Evaluates the role of the contemporary American press in a modern democracy. Such problems as violence, sensationalism and political bias will be investigated. Prerequisite: JN 100.

495 INTERNSHIP (1-12) An "internship" or work with local newspaper. Practice working on a publication, with attention given to the student's journalistic interest (news reporting, photography, editing) and the major aspects of production. Fall and spring. Prerequisite: JN 100.

MANAGEMENT (MGT)

302 LAND AND PROPERTY MANAGEMENT (3) This course is a study of the different types of land and real property acquisition, use, financing, and management. It is a detailed examination of sale, rental, lease, and occupancy of land and property with emphasis on the closing of title and rights and duties of ownership and possession. Condominium and cooperative ownership will be examined from the viewpoint of family housing. The function, practice, and procedures used by real estate brokers will be covered from an office management and profit making perspective. Tax, insurance,and consequences of sale for residential, rental, and industrial property will be discussed in detail, as well as financing sources and procedures for residential, rental, industrial, cooperative, condominium, and subdivisions, covering existing property and discussing construction financing for each type. Prerequisite: BUS 410 or instructor's consent.

305 FUNDAMENTALS OF INSURANCE AND RISK MANAGEMENT (3) This course provides the student with the fundamental concepts used by the insurance industry int he formulation of policies and premiums. The different types of insurance are examined, with a discussion of the factors to be considered in policy formulation. The relationship between the insurer and insured under applicable law is investigated and the methods of accounting specifically appropriate for insurance carriers are examined and the role of the actuary discussed. The effect of No Fault Insurance and Workmen's Compensation is examined, and the concept and practice of Risk Management by insurer and insured is investigated. Prerequisites: ACC 111; BUS 410.

371 PROCUREMENT AND PURCHASING MANAGEMENT (3) This course is an examination of procurement and purchasing from the point of view of the business selling goods or services to governmental agencies, as well as for the manager charged with purchasing goods and services for use by the firm. Applicable rules and regulations pertaining to governmental procurement will be examined and the different types of procurement contracts will be discussed. Industrial purchasing will be covered with emphasis on inventory, requirements, solicitation, evaluation, award, performance, and termination. Ethical considerations for the contracting officer and purchasing manager will be discussed. This course is especially applicable for the small business, and for those interested in a governmental procurement or industrial purchasing career. Prerequisites: BUS 130, ACC 111.

MATHEMATICS (MA)

090 GENERAL MATHEMATICS (3) Introduction to standard topics in arithmetic and basic algebra, including whole numbers, signed numbers, fractions, radicals, decimals, percents, solving equations, graphing, sets, exponents, inequalities, formulas, functions, and word problems. Problem solving will be stressed. Course does not count toward total credits needed for graduation.

101 COLLEGE ALGEBRA (3) Basic topics in algebra: exponents, polynomials, factoring, algebraic fractions, equations, functions, inequalities, and linear equations.

105 INTRODUCTORY STATISTICS (3) A survey of basic statistical methods for analyzing data. Topics include descriptive statistics, probability, sampling, point and interval estimation, hypothesis tests, linear regression, correlation, and non-parametric tests.

107 INTRODUCTION TO COMPUTER PROGRAMMING (3) Fundamentals of programming applied to the university computer. Use of computer language to solve practical problems pertinent to science, business, and other disciplines. Laboratory includes use of the terminals and the university computer.

109 FINITE MATHEMATICS (3) An initial treatment of those topics in basic mathematics that are of special importance in business and the social sciences. Topics included are logic, sets, and counting techniques, probability, mathematical models, linear equations and inequalities, introduction to linear programming, matrices. Markov chains, and game theory. Prerequisite: two years of college-preparatory high school mathematics or MA 111.

111 FUNDAMENTAL CONCEPTS OF CALCULUS (3) A one semester course in the fundamental concepts of calculus for non-physical science majors utilizing the basic techniques of differential and integral calculus. This course is not available for students who have completed MA 140. Prerequisite: MA 101 or equivalent.

120 MATHEMATICS OF FINANCE (3) An introduction to topics in mathematics that relate directly to the business world, interest, discount, compound interest, annuities, amortization, sinking funds, bonds, depreciation, capitalization, perpetuities. Prerequisite: one year of high school algebra.

125 MATHEMATICS FOR THE ALLIED HEALTH SCIENCES (3) This course is designed to meet the needs of the programs in X-ray technology and respiratory therapy at Robert Packer Hospital. The material covered includes elementary algebra, numerical trigonometry, a description of the system of real numbers and numeration systems.

130 ALGEBRA AND TRIGONOMETRY (3) Algebraic equations and inequalities, functions and graphs, polynomial functions, trigonometric functions and formulas, exponential and logarithmic functions, and complex numbers.

140 ANALYTIC GEOMETRY AND CALCULUS I (3) The rate of change of a function, limits, derivatives of algebraic functions, applications and integration. Prerequisite: MA 130 or equivalent.

141 ANALYTIC GEOMETRY AND CALCULUS II (3) Application of the definite integral, transcendental functions, hyperbolic functions, methods of integration and plane analytic geometry. Prerequisite: MA 140.

160 PROGRAMMING FOR THE MATHEMATICAL SCIENCES (3) Basic concepts of applications and approximations of the ideas of limit, continuity, and differentiability. Also, the standard concepts in applied mathematics such as error analysis, polynomial interpolation, and solution of linear and non-linear equations. The computer will be used as an aid to investigating these areas. Prerequisite: MA 140 or 111 or concurrent enrollment.

203 TOPICS IN ALGEBRA AND GEOMETRY (3) A study of the basic ideas and structure in modern algebra and geometry, including groups, fields, relations, graphs, congruences, and measurement. Prerequisite: MA 101 or permission of instructor.

205 STATISTICS II (3) This is a second course in statistics designed for students in business or the social sciences. Topics include multiple correlation, analysis of variance, time series analysis, non-parametric methods, index numbers and use of a computer software package (SPSS) in statistical computations.

240 ANALYTIC GEOMETRY AND CALCULUS III (3) Plane analytic geometry, polar coordinates, polar equations, plane areas in polar coordinates, parametric equations and vectors, quadric surfaces, vector functions and their derivatives, and complex numbers and functions. Prerequisite: MA 141.

241 ANALYTIC GEOMETRY AND CALCULUS IV (3) Partial differentation with applications, multiple integrals with applications, cylindrical and spherical coordinates, infinite series, power series, indeterminate forms. Prerequisite: MA 240.

250 APPLIED PROBABILITY AND STATISTICS (3) An introduction to applications of descriptive and inferential statistics and probability. Frequency distributions, measures of location and variation, probability, expected value, and decision making, probability distributions, sampling and sampling distributions, inferences concerning means, standard deviations, and proportions, analysis of variance, non-parametric methods, regression, correlation, planning surveys and experiments. Prerequisite: MA 140.

260 DISCRETE STRUCTURES (3) Foundations of mathematics, emphasizing fundamental concepts in abstract mathematics and deductive reasoning. Topics will include logic, Boolean algebra, sets, functions, relations, cardinality, number systems, abstract systems and algorithms. Prerequisite: MA 140.

280 LINEAR ALGEBRA AND MATRIX THEORY (3) Topics: geometry of vectors, matrix algebra and operations, solutions of general systems of linear equations, inversion of matrices, determinants, vectors and vector spaces, subspaces, linear independence, bases and dimension, linear transformations, characteristic roots and vectors and applications. Prerequisite: MA 141.

304 HISTORY AND PHILOSOPHY OF MATHEMATICS (3) A study of the chronological development of facets of mathematics that have contemporary importance. The historical and philosophical background of each facet is integrated with experience in mathematical study and application. Emphasis is placed on great contributors of mathematics, their contributions, and their methods of reasoning. Prerequisite: MA 260.

308 OPERATIONS RESEARCH (3) The development and use of the techniques of research. Topics include linear programming, queuing theory, probabilistic inventory models, and simulation. Prerequisites: MA 160 and 280 or permission of instructor.

310 NUMERICAL ANALYSIS (3) A study of numerical methods for the solution of algebraic, transcendental and differential equations, numerical integration and differentiation, and error analysis. Prerequisite: MA 107 or MA 160 and MA 240.

311 DIFFERENTIAL EQUATIONS I (3) Ordinary differential equations, exact equations, integrating factors, differential equations of the first order and first degree, differential equations with constant coefficients and applications. Laplace transforms and existence theorems. Prerequisite: MA 141.

312 DIFFERENTIAL EQUATIONS II (3) Series solutions to ordinary differential equations, solutions of partial differential equations and boundary value problems. Laplace transforms, and Fourier series. Prerequisite: MA 311.

315 APPLIED REGRESSION ANALYSIS (3) Simple and multiple regression will be used to analyze data. Residual analysis, indicator variables, and step-wise and polynomial regression. Computer software will be used to analyze data. Prerequisite: MA 105 or MA 250.

320 APPLIED COMBINATORICS (3) Applied discrete mathematics emphasizing combinatorics and graph theory. Topics will be chosen from counting methods, generating functions, recurrence relations, inclusion-exclusion, the Polya enumeration formula, graph theory, covering circuits, trees and searching and network algorithms. Prerequisite: MA 141.

324 APPLIED MATHEMATICS (3) A course to illustrate the principles and basic styles of thought in solving physical problems by mathematical methods. Particle dynamics, heat and fluid flow, wave equations, vector, Fourier and tensor analysis. Prerequisites: MA 240 and 280 or by permission of instructor.

329 MODERN GEOMETRY I (3) An introduction to the foundations of geometry with emphasis on the axiomatic development of the Euclidean system. Prerequisite: MA 260.

330 MODERN GEOMETRY II (3) The foundations of geometry with emphasis on non-Euclidean axiomatic structures. Prerequisite: MA 329 or by permission of instructor.

335 NUMBER THEORY (3) An analytical study of basic concepts including divisibility, congruence, quadratic reciprocity and Diophantine equations. Varied methods are stressed. Prerequisites: MA 141 and 260.

345 REAL ANALYSIS I (3) The real number system. Emphasis on the concepts and theoretical approach to calculus: functions, sequences, series, limits, continuity, derivatives, the Riemann integrals and sequences of functions. Prerequisites: MA 241 and 260.

346 REAL ANALYSIS II (3) A continuation of MA 345. Prerequisite: MA 345.

348 COMPLEX VARIABLES (3) A first course in complex variables. Complex numbers, analytic functions, elementary functions, mappings by elementary functions, integrals, power series, residues, poles, conformal mappings. Prerequisite: MA 241.

361 MODERN ALGEBRA I (3) Sets, rings, integral domains, fields, groups, polynomials, congruences, algebra or classes, mappings, homomorphisms and isomorphisms. Prerequisite: MA 260 or permission of instructor.

362 MODERN ALGEBRA II (3) A continuation of 361 consisting of a more detailed study of groups, rings, ideals, fields, and selected topics. Prerequisite: MA 361.

371 MATHEMATICAL STATISTICS I (3) Distributions of discrete and continuous random variables, expected values and moments, conditional probability and independence, special discrete and continuous distributions. Prerequisite: MA 241 or concurrent enrollment.

372 MATHEMATICAL STATISTICS II (3) Interval estimation, order statistics, point estimation, tests of hypotheses. Prerequisite: MA 371.

381 TOPOLOGY (3) An introductory course in point-set topology. Set theory, metric spaces, topological spaces, connectedness and compactness. Prerequisites: MA 141 and 260.

401 SELECTED TOPICS (3) Selections from topology, algebra, real analysis, matrix theory, computer science or other junior or senior level topics. Active participation by the student is required. Prerequisite: permission of instructor.

402 SEMINAR (3) Papers from the American Mathematical Monthly, comparable journals and various advanced references will be presented and discussed by the students. Continuous reading and participation will be required. Prerequisite: permission of instructor.

450 INTERNSHIP (3-12) The mathematics internship is designed to provide pre-professional skills to interested majors. Business, industry, educational or research work are examples of areas in which students can bring together academic training and practical experience.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

MILITARY SCIENCE (MS)

110 INTRODUCTION TO MILITARY SCIENCE I (1) Introduction to the history and organization of the Army and career opportunities for ROTC graduates. Classroom training and practical exercises in basic military skills.

120 INTRODUCTION TO MILITARY SCIENCE II (1) Land navigation procedures including the use of maps, aerial photographs and other topographic information including practical field training.

210 APPLIED LEADERSHIP AND MANAGEMENT I (1) The functions and responsibilities of leaders through the platoon level of command. Platoon level tactical concepts and principles. Continued development of leadership through practical exercises and field training.

220 APPLIED LEADERSHIP AND MANAGEMENT II (1) Fundamentals of leadership and management to include practical exercises in solving leadership problems. An in-depth study of the role and branches of the Army.

230 ROTC BASIC CAMP (4) The course is offered in lieu of the Basic Course for transfer students and other students who wish to enter the Advanced Course. The camp is held each summer at Fort Knox, KY and is six weeks in duration.

310 ADVANCED LEADERSHIP AND MANAGEMENT I (3) Development of the cadet into an effective leader by gaining an understanding of principles of leadership and appreciation of the operational setting within which most newly commissioned officers will work.

320 ADVANCED LEADERSHIP AND MANAGEMENT II (3) A detailed study of small unit tactics, to include an analysis of fire support available to the junior officer. An overview of special and combined operations. Includes a practical application phase during field training and leadership laboratories.

330 ROTC ADVANCED SUMMER PROGRAM (3) A six week practical application and evaluation phase required of each cadet prior to commissioning. Advanced Camp, conducted at Fort Bragg, North Carolina, places the cadets in leadership positions where they must put into practice the techniques learned on campus in both tactical and non-tactical situations.

410 THE MILITARY JUSTICE PARADIGM (3) A survey of military professional ethics and law and its relationship to the civil government structure. Instruction includes studies of case law, seminar discussions and a study of the Uniform Code of Military Justice.

420 THEORY AND DYNAMICS OF THE MILITARY TEAM (3) An analysis of military leadership problems and officer responsibilities in the modern Army with additional emphasis on military correspondence and briefings. Includes practical application.

MUSIC (MUS, APM, ENM)

100 INTRODUCTION TO MUSIC (3) Studies principal vocal and instrumental forms and media. Surveys the most important popular compositions from the early Baroque to the present. Designed for the non-music major. 3 Lect.

102 FUNDAMENTALS OF MUSIC (3) Designed as an elective for non-music majors. The fundamentals of music theory (melody, rhythm, harmony, form, and timbre) are introduced in a "hands-on" practical manner. Activities include analysis of music examples, composition, guided listening, performing, and keyboard theory lab. Music fundamentals will be approached from the standpoints of the listener, the performer, and the composer.

111 BASIC MUSIC I (3) Development of vocabulary; study of modes, scales, harmonic rhythmic, and composition techniques. Supportive examples selected from all periods of music. Sight singing and dictation. 2 Lect., 2 Recit.

112 BASIC MUSIC II (3) Continuation of Basic Music 1. Analysis and creative projects involving Baroque practices of figured bass, functional harmony, modulation, and altered chords. 2 Lect., 2 Rec.

122 CLASSIC AND ROMANTIC MUSIC (2-3) Surveys Western European and Early American musical literature and musical styles of the Classic and Romantic Era. 2 Lect., 1 Lab.

123 POST ROMANTIC AND 20TH CENTURY MUSIC (2-3) Surveys Western European and American musical literature and musical styles beginning with the post-Romantic era through main currents of 20th century composition. Concludes with an examination of contemporary styles. Prerequisite: MUS 122 or permission of instructor. 2 Lect., 1 Lab.

131 EURYTHMICS I (1) Laboratory experience in rhythmic movement to develop skill and greater perception of common rhythms. The Jacques-Dalcroze philosophy is followed. 2 Lab.

132 EURYTHMICS II (1) Develops greater sensitivity to and awareness of the nuances of dynamics and rhythm. Prerequisite: MUS 131, 2 Lab.

213 BASIC MUSIC III (3) Studies more elaborate harmonic and formal structures. Examines macro-micro elements in relation to performance practices. Creative and analysis projects based on fugal style, rondo and sonata form, and the art song. 2 Lect., 2 Rec.

214 BASIC MUSIC IV (3) Examines contemporary techniques. Examples selected from Debussy to post-1950. Creative projects involving the whole tones and twelve-tone scales, and aleatoric and electronic compositions. Sing singing and dictation to include atonal pitch sets. 2 Lect., 2 Rec.

222 MEDIEVAL AND RENAISSANCE MUSIC (2-3) Surveys Western European musical literature and musical styles beginning with the early Christian era through the Renaissance. Prerequisite: MUS 122 or permission of instructor. 2 Lect., 1 Lab.

223 BAROQUE MUSIC (2-3) Surveys Western European musical literature and musical styles of the Baroque Era. Prerequisite: MUS 122 or permission of instructor. 2 Lect., 1 Lab.

224 INTRODUCTION TO JAZZ (3) Studies the evolutionary history of jazz from the earliest African and European influences to the present. Emphasizes listening experiences and develops an awareness of the unique role of jazz in American culture. Open to all students. 3 Lect.

225 JAZZ STYLES AND ANALYSIS (3) In-depth examination and analysis of the stylistic features of the important performers and periods of jazz. Ability to read music required. 3 Lect.

311 ORCHESTRATION (2) Characteristics of orchestral instruments; scoring for various instrumental groups. Prerequisite: MUS 214 or permission of instructor. 2 Lect., 1 Rec.

312 JAZZ ARRANGING I (2) Studies techniques in arranging for modern jazz ensembles of all sizes. 1 Lect., 2 Lab.

313 JAZZ ARRANGING II (2) A more advanced course in the styles and techniques of arranging for modern jazz ensembles of all sizes. 1 Lect., 2 Lab.

315 ADVANCED HARMONY (3) Harmonic techniques of the late nineteenth and early twentieth centuries; interrelationships of harmonic vocabularly and musical form. Prerequisite: MUS 214. 3 Lect.

316 COUNTERPOINT (3) Studies the contrapuntal style of the late 17th and early 18th centuries. Prerequisite: MUS 214, 3 Lect.

321 PIANO LITERATURE I (2) Detailed study of the literature of the piano from the keyboard works of the late Renaissance through the piano works of the 18th century. 2 Lect.

322 PIANO LITERATURE II (2) Detailed study of the literature of the piano from the 19th century to the present day. 2 Lect.

324 JAZZ ENSEMBLE MATERIALS AND TECHNIQUES (2) Acquaints prospective directors of secondary school performing jazz ensembles with materials and techniques appropriate to the idiom. Highly useful to students interested in amateur or professional jazz ensemble performance outside of educational institutions. 1 Lect., 1 Lab.

331 CHORAL CONDUCTING (2) Prepares the future music educator to organize, teach, and conduct choral organizations of varying levels of achievement, particularly junior and senior high school age groups. Experience in conducting the class as a chorus is integral to the course. Prerequisite: MUS 112. 2 Lect., 1 Rec.

332 INSTRUMENTAL CONDUCTING (2) Prepares for conducting instrumental groups. Emphasis on communicative and control techniques of conducting and rehearsal and performance techniques. Experience through conducting a laboratory band and orchestra. Videotaping is utilized extensively with each individual. Prerequisite: MUS 112, 2 Lect., 1 Rec.

380 TEACHING MUSIC (3) Designed for elementary education major to develop the philosophy of music methods. Includes the use of classroom instruments, including piano, and the presentation of music materials available for K-6. 3 Lect., 1 Lab.

381 MUSIC IN THE ELEMENTARY SCHOOL (2) Study in teaching the elements of music through musical activities emphasizing the discovery approach. Includes a survey of current appropriate materials and observation/participation in area elementary school. Prerequisites: MUS 112 and 5 hours pre-professional experience. 2 Lect., 1 Lab.

382 MUSIC IN THE SECONDARY SCHOOL (2) Study in teaching musical concepts, knowledge, and skills in music classes and activities of the secondary school, grades 7 - 12. Emphasis on vocal music and general music classes. Development of a basic philosophy of music education at the secondary level. Prerequisites: MUS 112, 381, and 5 hours pre-professional experience. 2 Lect., 1 Lab.

383 INSTRUMENTAL MUSIC IN PUBLIC SCHOOLS (2) Study of a suitable instrumental program for a public school system. Particular attention to the class teaching techniques of the various instruments. Problems of organization and administration of such a program; survey and examination of the available instructional material. Prerequisites: MUS 112 and 5 hours pre-professional experience. 2 Lect., 1 Lab.

384 BASIC WOODWIND REPAIR (2) This course is designed to give the student the knowledge and skills needed to repair the majority of problems encountered on woodwind instruments.

400 STUDENT TEACHING (12) (By arrangement) Opportunity to apply knowledge and skills acquired in professional preparation. Accomplished by a field experience in university established centers under supervision of qualified cooperating teachers. Observations and conferences are scheduled by the university supervisor. Required course for all secondary education majors.

417 COMPOSITION I (3) Contemporary techniques of musical composition; emphasis on creative work. Prerequisite: MUS 214 or permission of instructor. 2 Lect., 1 Rec.

418 ADVANCED COMPOSITION (3) Continuation of Composition I. For students interested in more intensive work than can be provided in Composition 1. 2 Lect., 1 Rec.

421 AMERICAN MUSIC (3) Historical background and development of music in the United States from colonial times to the present. Studies the principal composers and their music. Reading, research, and listening emphasized. 3 Lect.

422 THE SYMPHONY (3) Studies orchestral music from its beginning. The Mannheim composers, the Viennese classics, the Romanticists and contemporary developments. Works will be analyzed and their historical, cultural, and philosophical backgrounds discussed. 3 Lect.

423 THE CONCERTO (3) Emphasizes the development of the concerto form and the stylistic contributions of the great masters. Representative works will be studied in score and recordings. 3 Lect.

424 ADVANCED MUSIC LITERATURE (3) Intensive study of selected choral, solo, chamber and orchestral masterpieces; emphasis on formal and stylistic developments. 3 Lect.

425 CONTEMPORARY MUSIC (3) Surveys the styles, forms, and musical techniques of contemporary music. 3 Lect.

426 WORLD MUSICS (3) A definition of the discipline of enthomusicology, its history and objectives will be followed by a discussion of the basic descriptive and analytical procedures, bibliography, and techniques. 3 Lect.

430 MUSIC FOR EARLY CHILDHOOD (1 OR 3) Explores and studies the ways in which music can contribute to the education of the preschool child. Musical activities and techniques will be demonstrated. Teaching materials and appropriate music literature will be examined.

431 PIANO FOR THE PRESCHOOL CHILD (2) Methods and materials for teaching piano to the preschool child. Demonstration lessons will be given. 2 Lect., 1 Lab.

440 MUSIC THEATRE PRODUCTION (2) Studies the techniques necessary to direct and stage music drama in school and community: setting up a production staff, proper rehearsal methods, public relations aspects, creating music drama from existing musical productions. 2 Lect., 1 Lab.

475 WOODWIND PEDAGOGY (2) Acquaints students with the woodwind instruments and their solo and ensemble literature. Lecture, demonstration, films, tapes, and recordings presented for flute, oboe, bassoon, clarinet, and saxophone.

476 BRASS PEDAGOGY (2) Studies the techniques, teaching problems, teaching materials, history, and literature related to the brass instruments.

484 PIANO PEDAGOGY (2) Studies procedures for class and individual instruction: emphasizes the ear approach as the basis for reading, true musical perception and intelligent understanding of the printed page. Examines and evaluates materials suitable for the first years of piano study. Prerequisite: permission of the instructor. 2 Lect., 1 Lab.

485 MARCHING BAND TECHNIQUES (2) Detailed study of the marching band including philosophy, styles, charting, music, materials, instrumentation, administration, and contemporary techniques. 2 Lect., 1 Lab.

486 DICTION FOR SINGERS (3) Systematically approaches pronunciation in solo and choral literature in English, Italian and Latin, French and German. The International Phonetic Alphabet will be used with emphasis on those elements of pronunciation which require modification from spoken to singing language. Includes listening, class performance, and teaching experiences. Open to graduates and undergraduates. 2 Lect., 1 Rec.

487 SONG LITERATURE (3) Studies development of monophonic song from the days of the troubadours and trouveres to the present time. Emphasizes especially the history of the German lied, the French chanson, or melody and solo song in the British Isles and the United States. Also includes the major composers of song in the Slavic countries, Spain, South America and Scandinavia. 3 Lect.

488 MUSIC MERCHANDISING (3) Presents an overall view of music merchandising, describes the various types of retailing, and acquaints the student with the administration, advertising, marketing processes, and consumer orientation necessary for the education of a person in the retail-wholesale aspects of the music industry. Prerequisites: BUS 130, CIS 105 or consent of instructor. 3 Lect.

489 MUSIC MERCHANDISING INTERNSHIP (12) For the educational and professional needs of the student. Provides experiences in the following: (a) a "hands-on" experience, (b) an opportunity to observe professionals in the field, (c) a broadening and understanding of problems and careers in the field, (d) an educationally directed field instruction, (e) an opportunity to apply knowledge, theory and understanding in a job situation, and (f) an opportunity to develop marketable skills.

490 PRACTICUM IN PIANO TEACHING (1) Introduces class and individual instruction techniques to be used with young beginners 1/2 Lect., 2 Lab.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

MUSIC - APPLIED (APM)

011 PIANO CLASS (0) Remedial piano study for those unable to meet entrance requirements. Subject to availability of staff. 2 Lab.

100 INTRODUCTION TO THE PIANO (1) This course is designed to give non-music majors with no previous keyboard experience an opportunity to learn the very basics of piano playing.

101 VOICE CLASS I (1) Develops proper vocal production, poise, and confidence in solo singing. Remedial work for individual problems. 2 Lab.

102 VOICE CLASS II (1) Continuation of Voice Class I. Prerequisite: APM 101. 2 Lab.

103 ADVANCED VOICE CLASS (1) Instruction in voice will be given on a level beyond beginning voice class (APM 101 and 102). Goals of the course:to improve technique, quality, and artistry of individual voices; and to focus class attention on common vocal problems and their remediation.

111 CLASS PIANO I (1) For the student with limited piano skill. Prerequisite: ability to perform with reasonable fluency at least five pieces from the last pages of any standard first grade instruction book (such as Thompson, Schaum, Fletcher, Kasschau, et al), and to play at sight pieces from the first half of a similar book. The class size shall be limited to one person for each available keyboard. This course cannot be repeated for credit. 2 Lab.

112 CLASS PIANO II (1) Designed for the music major who has successfully completed APM 111, Class Piano I, and who might reach the level of skill required by the First Proficiency Examination.

113 KEYBOARD SKILLS I (1) Intensive work in accompanying melodies in major and minor keys, with beginning work in modal harmony. Development of varied accompanimental styles, improvisation, command of functional harmony, "playing by ear," transposition, sight reading melodies from elementary music, and harmonizing these melodies at sight. Prerequisite: Basic Music II. 1 Lab.

114 KEYBOARD SKILLS II (1) Continuation of Keyboard Skills I. More complex accompanimental styles, secondary dominant chords, improvisation, transposition, "playing by ear," modulatory techniques, sight reading from junior high music series, sight reading melodies and supplying appropriate accompaniment. Prerequisite: Keyboard Skills I or equivalent. 1 Lab.

115 FUNDAMENTALS OF JAZZ IMPROVISATION I (2) Studies the materials, styles, and techniques of creative and spontaneous jazz performance. An important course for all students interested in the performance of jazz. 1 Lect., 2 Lab.

116 FUNDAMENTALS OF JAZZ IMPROVISATION II (2) Continuation of Fundamentals for Jazz Improvisation I. APM 116 is an important course for all students interested in the performance of jazz. 1 Lect., 2 Lab.

117 ADVANCED JAZZ IMPROVISATION I (2) Motivates and crystalizes the improvisational abilities of the serious jazz musician. Emphasizes the development of a highly individualized and creative style. 1 Lect., 2 Lab.

118 ADVANCED JAZZ IMPROVISATION II (2) Continuation of Advanced Jazz Improvisation I. APM 118 is an important course for all students interested in the performance of jazz. 1 Lect., 2 Lab.

131 WOODWIND CLASS I (1) Gives the fundamental principles and techniques necessary for playing and teaching the flute and clarinet; study of the literature appropriate for beginning class instruction. 3 Rec.

132 WOODWIND CLASS II (1) Gives the fundamental principles and techniques necessary for playing and teaching the saxophone, oboe, and bassoon; study of the literature appropriate for beginning class instruction. 3 Rec.

134 ADVANCED WOODWIND CLASS (1) Instruction in woodwind instruments on a level beyond that of the beginning courses. Introduces more scales, more advanced work with embouchure, tone, tonguing. Suitable literature for the various instruments. 1 Rec.

141 BRASS CLASS I (1) Gives the fundamental principles and techniques necessary for playing and teaching of the trumpet and horn; study of the literature appropriate for beginning class instruction. 3 Rec.

142 BRASS CLASS II (1) Gives the fundamental principles and techniques necessary for playing and teaching of the trombone, euphonium, and tuba; study of the literature appropriate for beginning class instruction. 3 Rec.

143 ADVANCED BRASS CLASS (1) Instruction in brass instruments on a level beyond that of the beginning courses. Scales in various articulations and ranges, more advanced technical work and styles, suitable literature for the various instruments. 1 Rec.

151 STRING CLASS I (1) Acquaints the non-string player with the basic elements of string instrument playing. Instruction in various instruments, fundamentals of correct playing, and familiarity with problems of class instruction in typical elementary school string classes. 3 Rec.

152 STRING CLASS II (1) Continuation of String Class I. Students specialize on violin, viola, cello, or bass. Presents keys up to four sharps and two flats with corresponding fingering problems. Introduces bass players to various positions, and cello players to extended second finger pattern. Introduces various staccato bowing patterns. Violin and violo students practice simple third position exercises. Principles of vibrato presented. 3 Rec.

153 ADVANCED STRING CLASS (1) Instruction in stringed instruments on a level beyond that of the beginning courses. Introduces scales in various positions, more advanced work with the various staccato and spiccato bowings. Suitable literature for the various instruments.

154 GUITAR CLASS (1) Beginning study of the guitar. Functional use of the guitar in the music classroom. Accompanying singing. 1 Rec.

160 PERCUSSION CLASS (1) Studies the characteristics for the various percussion instruments; performance techniques; development of performing ability necessary to teach the percussion instruments at the elementary and secondary level of instruction. 3 Rec.

161 ADVANCED PERCUSSION CLASS (1) Instruction in percussion instruments on a level beyond that of the beginning course. Introduces more advanced work with the various percussion instruments. Suitable literature for various instruments. 1 Rec.

ALL 200 LEVEL COURSES BELOW ARE 1/2 HR LESSON FOR (1) CREDIT HOUR
ALL 300 LEVEL COURSES BELOW ARE 1 HR LESSON FOR (2) CREDIT HOURS

APM

200 VOICE I (1/2 hr. lesson)
300 VOICE II (1 hr. lesson)
210 PIANO I (1/2 hr. lesson)
310 PIANO II (1 hr. lesson)
211 HARPSICHORD I (1/2 hr. lesson)
311 HARPSICHORD II (1 hr. lesson)
220 ORGAN I (1/2 hr. lesson)
320 ORGAN II (1 hr. lesson)
230 FLUTE I (1/2 hr. lesson)
330 FLUTE II (1 hr. lesson)
231 OBOE I (1/2 hr. lesson)
331 OBOE II (1 hr. lesson)

232 CLARINET I (1/2 hr. lesson)
332 CLARINET II (1 hr. lesson)
233 BASSOON I (1/2 hr. lesson)
333 BASSOON II (1 hr. lesson)
234 SAXOPHONE I (1/2 hr. lesson)
334 SAXOPHONE II (1 hr. lesson)
240 TRUMPET I (1/2 hr. lesson)
340 TRUMPET II (1 hr. lesson)
241 HORN I (1/2 hr. lesson)
341 HORN II (1 hr. lesson)
242 TROMBONE I (1/2 hr. lesson)
342 TROMBONE II (1 hr. lesson)
243 EUPHONIUM I (1/2 hr. lesson)
343 EUPHONIUM II (1 hr. lesson)
244 TUBA I (1/2 hr. lesson)
344 TUBA II (1 hr. lesson)
250 VIOLIN I (1/2 hr. lesson)
350 VIOLIN II (1 hr. lesson)
251 VIOLA I (1/2 hr. lesson)
351 VIOLA II (1 hr. lesson)
252 CELLO I (1/2 hr. lesson)
352 CELLO II (1 hr. lesson)
253 BASS I (1/2 hr. lesson)
353 BASS II (1 hr. lesson)
254 HARP I (1/2 hr. lesson)
260 PERCUSSION I (1/2 hr. lesson)
360 PERCUSSION II (1 hr. lesson)

For Bachelor of Music Program Only: 400 level courses available in most of the above areas for (4) credit hours each.

MUSIC - ENSEMBLE (ENM)

all of the following 200 level ensembles are also available at the 100 level for "0" credit.

250 BAND I (1) Concert Wind Ensemble. A highly select concert band of 48 woodwind brass and percussion players selected by audition at the beginning of each semester. In addition to presenting concerts on campus, the Wind Ensemble is a touring ensemble. 3 Labs.

251 BAND II (1) Mountie Marching Band. Fall semester only. Performs at all home football games, and hosts the Mansfield University Band Day. Performs at out-of-town football games, as well as periodic appearances at professional games, special functions, and international events. 6 labs.

251 BAND II (1) Symphonic Band. Spring semester only. Approximately 60 members selected by audition. Studies a wide variety of band literature and presents concerts on campus. 3 Labs.

253 ORCHESTRA I (1) College-Community Symphony. Provides an opportunity to participate in the performance of standard symphonic literature. The orchestra presents a concert each semester, accompanies outstanding student soloists, participates in the biennial choral festival, and is a touring ensemble. 4 Labs.

256 CHORUS I (1) Concert Choir. A highly select choir of 48 voices. Presents a concert each semester and joins with the other choruses for a biennial choral festival. The choir is a touring ensemble. 3 Labs.

257 CHORUS II (1) Festival Chorus. A mixed chorus providing opportunity to experience great choral literature. Presents a concert each semester and joins other choruses for the biennial choral festival. 3 Labs.

258 CHORUS III (1) Freshman Chorus. A mixed chorus required of all freshman in the music education curriculum. Presents a concert each semester and joins with the other choruses for the biennial choral festival. 3 Labs.

260 PIANO ENSEMBLE (1) Study and performance of two-piano and four-hand literature, chamber music, sonatas and trios. Accompaniment of standard instrumental and vocal literature. 1 Lab.

261 PERCUSSION ENSEMBLE (1) Study and performance of representative works for all combinations of percussion instruments. 1 Lab.

262 OPERA WORKSHOP (1) Study and performance of operatic and musical comedy scenes chosen according to the abilities of the students in the workshop. Full-scale musical comedy productions done in conjunction with the department of speech, communications and theatre. Under supervision, students perform in, musically direct, coach, accompany, conduct, and stage direct various scenes.

263 WOODWIND ENSEMBLE (1) Study and performance of representative works for various woodwind ensembles. One woodwind quintet and one sax quintet take an annual tour.

264 BRASS ENSEMBLE (1) Study and performance of representative works for various combinations of brass instruments.

265 MANSFIELDIANS (1) A pop singing ensemble. Audition required. Specializes in singing folk, popular, and show music. Available for performances in public schools, service agencies, and alumni functions. 2 Labs.

266 CONCERT JAZZ BAND (1) Performs several times each year on campus as well as touring and performing concerts offcampus. Membership by audition. 3 Labs.

268 STRING ENSEMBLE (1) Study and performance of standard literature for string ensembles. 1 Lab.

269 CHAMBER SINGERS (1) A vocal chamber ensemble. Audition required. Specializes in repertoire of the vocal chamber medium. Concerts are given at the University and off-campus by request. 2 Labs.

270 SMALL JAZZ AND COMMERCIAL ENSEMBLES (1) Provides opportunity for students to gain supervised experience in performing jazz and other current professional music idioms in small groups. 2 Labs.

271 VOCAL ENSEMBLE (1) Studies and preforms representative works for various vocal combinations. 1 Lab.

MUSIC THERAPY (MTH)

210 PRACTICUM/INTERNSHIP I (1)

211 SEMINAR I (1)

271 THERAPY ORIENTATION (3) Studies environments in which music can be used therapeutically, from psychiatric hospitals, to private practice and public schools. Visits to many kinds of facilities for broadening the horizon of the student.

310 PRACTICUM/INTERNSHIP II (1-2)

311 SEMINAR II (1)

ALL PRACTICUM students will observe and participate in a variety of clinical settings and in a weekly seminar. Written observations and a paper required. Prerequisite: MTH 271.

372 PSYCHO-SOCIAL FOUNDATIONS OF MUSIC I (2) Studies the functional uses of music, its psychological attributes, and its aesthetic effects. Students will report orally on individual projects.

373 PSYCHO-SOCIAL FOUNDATIONS OF MUSIC II (2) Studies the physical attributes of sound, basic research practices, and experimental processes.

410 PRACTICUM/INTERNSHIP III (2-4)

411 SEMINAR III (1)

471 INFLUENCE OF MUSIC ON BEHAVIOR (3) An in-depth look at the properties of music that help in behavior modification and the methods of using music to improve behavior.

472 MUSIC IN THERAPY (3) Studies in depth how music helps in therapeutic settings. Choice such as a hospital, state school, correctional facility, public school, special education, private schools, private practice, may be available.

475 INTERNSHIP (2) Practical application of theories of uses of music in therapeutic settings. Choice such as a hospital, state school, correctional facility, public school, special education, private schools, private practice, may be available.

PHILOSOPHY (PHL)

201 INTRODUCTION TO PHILOSOPHY (3) Examines the basic, foundational beliefs of people in the religious, scientific, ethical, and political dimensions of life. Exercises the student's ability to identify his/her own basic beliefs and subject these to critical evaluation. Examples of issues discussed are whether ethical values are relative, the existence of God, the nature of justice, and human freedom.

202 PHILOSOPHY AND CONTEMPORARY ISSUES (3) Analyzes arguments pertaining to difficult contemporary issues. Emphasis is on clarifying and evaluating the conclusions of such arguments. Discussion subjects include: abortion, euthanasia, environmental protection, the arms race, the rights of women and minorities, censorship and pornography, etc. Course goal is to enable the student to assess the strengths and weaknesses of the various positions on each issue. Prerequisite: PHL 201.

220 EASTERN APPROACHES TO REALITY (3) An examination of the philosophical perspective of the Eastern mind as exhibited in Hinduism, Buddhism, Taoism, Confucianism, Zen Buddhism. The primary focus of the course is on the difference between the Eastern and Western modes of looking at the world. Prerequisite: PHL 201.

230 INTRODUCTION TO LOGIC (3) Studies the basic principles of deductive and inductive thinking. Includes informal as well as formal logic. Syllogistic reasoning and elementary symbolic logic may be introduced. Fallacies in advertising, statistical arguments, political campaigns, and everyday speech are examined.

240 ETHICS (3) Examines how to make rational decisions in situations with a moral dimension. Traditional and contemporary applied problems in ethics, e.g. sexual morality, cheating. Examines the moral implications of various lifestyles. Course goal is to assist students in developing the ability to function as morally autonomous persons. Prerequisite: PHL 201.

250 AMERICAN PHILOSOPHY (3) Examines the main movements in American thought, especially the pragmatic. Course focus is on the relation between American philosophy and other aspects of the American experience and character. Classical and contemporary figures are treated. Examines specifically American thought outside of academic philosophy, e.g. in economics and psychology. Prerequisite: PHL 201.

270 EXISTENTIALISM (3) Analyzes this contemporary movement which emphasizes human uniqueness and value. Existential themes include freedom, commitment, self-determination, and authenticity. Major philosophers considered are Kierkegaard, Nietzsche, Heidegger, and Sartre. Prerequisite: PHL 201.

280 PHILOSOPHY OF RELIGION (3) Analyzes the validity of various proofs of God's existence. Also examines religious language, the differences between faith and reason, the question of religious authority, and the reasonableness of the religious lifestyle. Prerequisite: PHL 201.

290 SCIENCE AND VALUES (3) Examines problems raised by science and technology. Topics will include: the ethics of experimentation; racism and sexism in science; the limits to technological growth; ecological and nuclear disaster; creationism versus evolutionism; ugliness and beauty in a technological environment. The course is geared to both specialists and non-specialists in philosophy or science. Prerequisite: PHL 201.

300 PHILOSOPHY OF THE ARTS (3) A detailed survey of both classical and modern aesthetic theories along with a criticism of each. Prerequisite: PHL 201.

310 SOCIAL AND POLITICAL PHILOSOPHY (3) An analysis of philosophical concepts and arguments presupposed in social and political discourse. Topics include: liberty and its limits, human rights, economic and social justice, the nature of political obligation and disobedience. Emphasis is on evaluating philosophical theories from both contemporary and historical sources. Prerequisite: PHL 201.

320 PHILOSOPHY OF LAW (3) An analysis of philosophical concepts and arguments presupposed in legal discourse and reasoning. Topics will include: the nature of law and legal decision making; theories of justice, privacy, responsibility and punishment. Emphasis is on examining specific legal cases along with relevant philosophical analysis and theories from both contemporary and historical sources. Prerequisite: PHL 201.

350 THE CONCEPT OF MIND (3) Investigates various philosophical theories concerning the nature of mind. Topics include: the possibility of artificial intelligence, the nature of consciousness, emotion and imagination, dreaming, mind-brain identity, the concept of the unconscious, animal intelligence, the mind as program, and human freedom. Prerequisite: PHL 201.

360 THE CONCEPT OF KNOWLEDGE (3) An examination of some philosophical concepts and arguments presupposed in discourse about knowledge. Topics include: the possibility that we do not know anything; problems of perception and illusion; problems of evidence acquisition; the nature of scientific knowledge; skepticism; astrology and religion; recent research in cognitive science. Major philosophical theories from both contemporary and historical sources are utilized. Prerequisite: PHL 201.

370 PHILOSOPHY OF LANGUAGE (3) An examination of the logical structures of descriptive and nondescriptive linguistic activities. Emphasis is on the picture theory of representational language as presented in Ludwig Wittgenstein's Tractatus Logico-Philosophicus. Prerequisite: PHL 201.

380 HEALTH CARE ETHICS (3) An examination of the arguments designed to provide solutions to moral problems commonly faced by health care professionals. Topics will include: lies to the sick and dying; abortion; euthanasia and the treatment of defective newborns; privacy and confidentiality; suicide intervention; paternalism and limiting liberty; allocation of scarce health care resources; strikes for better wages and working conditions; experimenting with human subjects; nurse/physician and nurse/client relationships; moral decision-making. Prerequisite: none.

420 CLASSICAL GREEK PHILOSOPHY (3) A serious investigation of Western philosophy from the beginning through Aristotle. The relationships between philosophy and other areas of Greek culture are examined. Extended treatments of the preSocratics, Plato and Aristotle are presented. Prerequisite: PHL 201.

422 FOUNDATIONS OF MODERN PHILOSOPHY (3) Includes study of the philosophical thought of the early scientists whose investigations culminated in the contemporary scientific method. Philosophers of the 17th and 18th centuries are examined, from Thomas Hobbes to Immanuel Kant. Problem areas of this period are: the mind-body relationship, the possibility of knowledge, perception, and the status of ideas. Prerequisite: PHL 201.

423 CONTEMPORARY PHILOSOPHY (3) Analysis of the defining features of major contemporary philosophical movements, with attention primarily to logical positivism, linguistic analysis, pragmatism, and existentialism. Prerequisite: PHL 201.

450 INTERNSHIP (12) (Obtain information from Philosophy chairperson)

490 SEMINAR (1-3) A supervised investigation of a specialized problem in philosophy or into the writings of a specific philosopher or philosophic movement. Prerequisite: PHL 201.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies).

PHYSICS (PHY)

130 HOUSEHOLD PHYSICS (3) Introduction to the basic concepts of physics by utilizing devices and appliances used in the home today. 2 Lect., 2 Lab.

151 CONCEPTUAL PHYSICS I (4) An introduction to both classical and modern physics without the use of calculus. Designed to enable the student to appreciate the role of physics in society. 3 Lect., 2 Lab.

152 CONCEPTUAL PHYSICS II (4) Continuation of PHY 151. 3 Lect., 2 Lab.

160 PHYSICS OF MUSICAL SOUND (3) A nonmathematical approach to the physical principles involved in the generation, transmission and detection of sound. 2 Lect., 2 Lab.

165 PHYSICS FOR THE ALLIED HEALTH SCIENCES (3) This course is designed to give students in the Allied Health Sciences the physics background they need for their professional work. Selection of material is based on the appropriateness to the life sciences without limiting basic concepts found in all introductory physics courses. 2 Lect., 2 Lab.

170 INTRODUCTION TO ELECTRONIC APPARATUS (3) Elementary principles of electrical circuits are taught in lecture and extensively applied in the laboratory by building kits (radio, meters, amplifiers, etc.) of the student's choice. Study for third and second class FCC licenses is sometimes available. 1 Lect., 4 Lab.

188 GENERAL PHYSICS I (4) A three-semester calculus physics course emphasizing classical concepts. Selected topics in mechanics, heat, electro-statics, electromagnetism, waves and optics. Prerequisite: MA 140 or taken concurrently with PHY 188. 3 Lect., 1 Recit., 2 Lab.

191-192 PHYSICS I, PHYSICS II (4) A one-year sequential calculus physics course discussing classical mechanics,fluids, thermodynamics, classical electricity and magnetism, optics and waves, modern physics. Application of physics to life science is made in problem selection and laboratory experimentation. Corequisite for PHY 191: Calculus I; for PHY 192; PHY 188 or 191. 3 Lect., 1 Recit., 2 Lab.

211 GENERAL PHYSICS II (4) Continuation of PHY 188 or 191. 3 Lect., 1 Recit., 2 Lab.

212 GENERAL PHYSICS III (4) Continuation of PHY 211. 3 Lect., 1 Recit., 2 Lab.

250 THE RESTLESS ATMOSPHERE (3) An introduction to dynamical meterology which includes general circulation theory, energy budget, instrumentation, weather modification. Prerequisite: high school physics or higher, or permission of instructor. 2 Lect., 2 Lab.

311 MODERN PHYSICS I (3) An introduction to 20th century physics, including the structure of atoms and nuclei, basic ideas of quantum mechanics and solid state theory. Prerequisites: PHY 188, 211.

312 MODERN PHYSICS II (3) Continuation of PHY 311. 3 Lect.

313 PHYSICAL MECHANICS I (3) An analytic treatment of classical mechanics covering the methods of statics and dynamics of rigid bodies with application to physical problems; small oscillations; generalized coordinates and Lagrange's equations. Prerequisites: PHY 188, MA 240 and 311.

314 PHYSICAL MECHANICS II (3) Continuation of PHY 313.

315 EXPERIMENTAL PHYSICS I (3) Experiments in electrical measurements and circuit elements, optics and atomic physics. Prerequisite: PHY 211. 1 Lect., 4 Lab.

316 EXPERIMENTAL PHYSICS II (3) Continuation of PHY 315. 1 Lect., 4 Lab.

317 PHYSICAL OPTICS (3) Wave phenomena, electromagnetic theory of light, interference, diffraction, polarization and nonlinear optics. Prerequisites: PHY 212, MA 311.

318 THERMODYNAMICS (3) An introduction to thermal physics and kinetic theory. Prerequisites: PHY 212, MA 311.

319 INTRODUCTION TO SOLID STATE PHYSICS (3) A brief summary of the theory underlying the behavior of solids. Emphasis on transport theory, interaction of light and matter, semiconductor devices, superconductors and lasers. Prerequisite: PHY 311.

320 ACOUSTICS (3) Fundamentals of sound waves including generation, transmission and detection of sound. 2 Lect., 2 Lab.

321 SELECTED TOPICS I (3) Any selected topics not sufficiently well covered in a general course. 3 Lect.

322 SELECTED TOPICS II (3) Same as PHY 321.

333 SPACE DYNAMICS (3) Application of Newtonian mechanics to solution of actual problems in satellite trajectories and orbit; celestial mechanics and navigation. Prerequisites: PHY 188, MA 311.

334 ASTROPHYSICS (3) Application of physics and mathematics to the field of astronomy. A study of stellar models, stellar evolution, radio astronomy and recent discoveries in astronomy. Prerequisites: PHY 311, MA 311.

351 SOLAR ENERGY UTILIZATION (3) Development of the details of solar energy as an alternate technology including physical and engineering principles.

401 ELECTRICITY AND MAGNETISM I (3) Foundations of electromagnetic theory including electrostatics, dielectric theory, magnetic properties. Prerequisite: MA 240, 311 and PHY 211.

402 ELECTRICITY AND MAGNETISM II (3) Continuation of PHYS 401.

407 INTRODUCTION TO QUANTUM MECHANICS (3) An introduction to wave mechanical and axiomatic approaches with simple applications. Prerequisites: PHY 311, MA 311.

408 ATOMIC AND NUCLEAR PHYSICS (3) Continuation of PHY 407; physical applications of quantum mechanics to atomic and nuclear physics.

415 EXPERIMENTAL PHYSICS III (3) Research problems are assigned to the student on an individual basis. 6 Lab.

416 EXPERIMENTAL PHYSICS IV (3) Same as PHY 415. 6 Lab.

450 CURRENT SCIENTIFIC PHENOMENA (1-3) This course permits students to take advantage of important temporary phenomena. Thus credit hours, period and time of presentation and instructional personnel must vary. Selection of topics will be based upon intrinsic value and interest as well as importance for other courses.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

POLITICAL SCIENCE (PSC)

PUBLIC ADMINISTRATION (PA)

100 INTRODUCTION TO POLITICS (3) This course is designed to provide nonmajors with a general introduction to the basic issues, ideas, and dilemmas of contemporary politics.

101 AMERICAN POLITICS (3) A study of the basic organization of our national government, covering democratic principles, constitutional foundations, federalism, civil rights, the political party-system, governmental branches and their functions, federal regulations and welfare services.

202 STATE AND LOCAL POLITICS (3) An inquiry into the structure, organization of the states and their locales; such problems and issues as federalism, taxation, and intergovernmentalism are discussed.

203 POLITICAL PARTIES AND INTEREST GROUPS (3) A study of the development and nature of the American Party System; party activities in and out of government; the interaction of political parties and interest groups; the role of interest groups in government; the nomination and electoral systems.

206 POLICY FORMATION & IMPLEMENTATION (3) This course is concerned with what governments do, why they do it and what difference it makes. Prime emphasis will be placed on description, analysis and explanation of the causes and consequences of governmental activity.

210 CONTEMPORARY ISSUES IN WORLD AFFAIRS (3) Examination of 20th century problems of the nation-state system; power, national interest, alliances, developing nations, regionalism, interdependence, and United States foreign policy.

212 INTRODUCTION TO COMPARATIVE GOVERNMENT AND POLITICS (3) A comparative survey of the government and politics of representative nations. Investigation of political cultures, elites, party systems, and policy-making processes; factors contributing to consensus and cleavage, problems of technological societies.

216 POLITICAL LEADERSHIP (3) Personal, social and political sources of leadership. Styles, settings and techniques of leadership will be covered. Comparison of leadership in different political settings.

228 INTRODUCTION TO POLITICAL ECONOMY (3) Study of the role of government in the U.S. economy; investigation of alternate approaches to interpret contemporary political economy; the nature and uses of power and the implications public policy.

235 INTRODUCTION TO POLITICAL ANALYSIS (3) This course deals with the methods of comparison and introductory political analysis as applied to political systems and individual political behavior. Examination of power, authority, leadership, decision making, and voting behavior.

240 (PA) INTRODUCTION TO PUBLIC ADMINISTRATION (3) An examination of the roles and characteristics of bureaucracy in modern government. Administrative decision making is analyzed in terms of the relationship between organizational structures and social and political environments.

302 PRESIDENT AND CONGRESS (3) A study of the ways in which the political and governmental institutions of Congress and the Presidency have developed and the ways in which they manage their relationships with each other.

304 PUBLIC OPINION AND POLITICAL BEHAVIOR (3) Analysis of the role of public opinion in the political system. The process by which political opinions are formed, communicated and to influence political behavior. The design and administration of a survey to measure political opinions.

310 U.S. FOREIGN POLICY (3) United States foreign policy in the period since World War II is examined with emphasis on American interest in key areas. American values in foreign policy roles of leaders instrumental in creating and developing foreign policy objectives.

315 SELECTED TOPICS IN COMPARATIVE POLITICS (3) Cross-national analysis of the political values, processes and institutions of selected groups of nation-states for the more advanced student.

321 CONSTITUTIONAL LAW (3) An inquiry into the general principles of the American constitutional system and the role of the judiciary in the interpretation of individual rights.

331 DEVELOPMENT OF WESTERN POLITICAL THOUGHT (3) A study of fundamental problems in Western political thought. Topics investigated will include sources of authority and obedience, origins and functioning of the policy, the role of law in society, relationship between state and individuals, characteristics of the good state.

333 FOUNDATIONS OF MODERN POLITICAL THOUGHT (3) This course investigates the major political ideas of the 19th century - liberalism, conservatism, nationalism, socialism, and communism - as the foundation for 20th century ideologies, with emphasis on their analysis as attempts to solve the problems of industrial society.

335 AMERICAN POLITICAL THOUGHT (3) An examination of American political thought through the writings of selected political thinkers. Analysis and development of political areas and their influence on modern political debate and action.

342 (PA) ORGANIZATIONAL THEORIES (3) An examination of the development of various major approaches and theories of organization and administration with special emphasis on evolving concepts about organization-administrative behavior and its impact on society.

344 (PA) PERSONNEL MANAGEMENT (3) To serve as an introduction to the field of personnel administration; to provide students with a detailed review of the major issues, problems, concerns and techniques of contemporary public personnel management.

345 (BUS) (PA) GOVERNMENT AND BUSINESS IN SOCIETY (3) Examines the idea of "social responsibility" of business. Examines the political and economic framework that affects legislation and business strategy. Considers the value judgments which influence policy makers.

346 (PA) SELECTED TOPICS IN PUBLIC ADMINISTRATION (3) This course is intended to give students the opportunity to conduct investigation and analysis of specialized topics. It is designed for the technical political science major, the student minoring in public administration, and with a strong emphasis in public administration.

450 INTERNSHIP (1-12) The political science internship is designed to give a student actual experience in the work of an agency and an understanding of the agency's position in the community. Further, the intern should become aware of the agency's philosophy and goals, the formal and informal organization of the agency, and the role for the agency in the political system.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

PSYCHOLOGY (PSY)

101 INTRODUCTION TO GENERAL PSYCHOLOGY (3) Designed to familiarize students with the application of scientific psychology to human life. Emphasis is on "normal" behavior and its antecedents. The study of broad categories of human behavior through various psychological models and their application to understanding human behavior. 2 Lect., 1 Lab.

105 PARENT-CHILD COMMUNICATION (3) An applied course in the psychology of child rearing based on modern principles of behavior. Supervised projects will be used to insure a working knowledge of the techniques. 2 Lect., 1 Lab.

150 INTRODUCTION TO SCIENTIFIC PSYCHOLOGY (1) Directed reading and presentations: (1) the broad range of facts which form the body of psychology, (2) research strategies for fact finding, and (3) theories of behavior which serve as an organizational framework. Prerequisite: prior or concurrent PSY 101. 1 Recit.

200 SURVEY AND DATA ANALYSIS (3) Covers nonexperimental and survey techniques used in the behavioral sciences. Emphasis on design, computerized data analysis, and report writing. Prerequisite: PSY 101 and MA 105.

201 TESTS AND MEASUREMENTS OF PSYCHOLOGY (3) Covers the theory and techniques of behavioral assessment emphasizing computerized methods. Surveys psychological tests and their applications. Prerequisites: PSY 101; MA 105 recommended.

210 PSYCHOLOGY OF FAMILY RELATIONS (3) Survey course covering the psychological dynamics of the family as a unit, parentchild interactions, the effect of developmental events on the psychology of the family, divorce, single parent families, etc. Class discussion, psychodrama, and films are used to illustrate these concepts.

212 HUMAN SEXUALITY (3) A survey of scientific findings in the area of human sexual behavior. Includes topics of current interest and controversy as well as the traditional ones.

222 PSYCHOLOGICAL DEVELOPMENT OVER THE LIFE SPAN (2) The course will present an overview of the major age-related differences and changes in human behavior and experience. Prerequisite: PSY 101.

230 (ED) EDUCATIONAL PSYCHOLOGY (3) A study of the basic factors in the learning process, with emphasis on the application of principles of psychology to problems of learning and teaching. Prerequisite: PSY 101.

250 EXPERIMENTAL DESIGN I (4) Covers the design of controlled experiments in the behavioral sciences including use of the microcomputer. Prerequisites: PSY 101 and MA 105. 3 Lect., 2 Lab.

251 EXPERIMENTAL DESIGN II (4) Advanced techniques are learned through an individualized research project culminating in a report suitable for publication. Prerequisite: PSY 250. 3 Lect., 2 Lab.

270 PSYCHIC PHENOMENA (3) A survey and scientific analysis of the various behaviors labeled "psychic," including parapsychological, mystical, astrological, and hypnotic. The student will carry out and write up representative experiments. Prerequisite: PSY 101 or permission of instructor. 1 Lect., 1 Recit., 1 Lab.

290 LIFE SPAN DEVELOPMENT (3) A broad survey of what is presently known about the highly interactive aspects of human behavioral development: Biological, psychological, and social. Prerequisite: PSY 101.

291 ABNORMAL PSYCHOLOGY (3) This course is designed to give students a general introduction to the field of abnormal psychology. Major models of psychopathology and the causes and symptoms of abnormal thinking and behavior are considered. Prerequisite: PSY 290 or permission of instructor. 2 Lect., 1 Recit.

300 HELPING SKILLS I (3) Considers modern theory and research in counseling psychology. Students are given the opportunity to develop and practice specific helping skills in the classroom. Core dimensions in the helping process are emphasized. Prerequisites: PSY 101 and 291, or equivalent, permission of instructor and upper division standing.

301 HELPING SKILLS II (3) Considers advanced theory and applications in counseling psychology. The development of helping skills is viewed in historical perspective and a variety of modern helping methods are examined. Professional ethics, methods of evaluating change achieved through the helping process, and community applications are examined. Prerequisite: PSY 300.

310 SOCIAL PSYCHOLOGY (3) Covers the individual aspects of social behavior. Attention is focused on problems in perception, thinking and motivation. The following topics are examined: theories of person perception; attitude formation; personality structure; motivational determinants of group membership and social conformity, social roles and leadership. Prerequisite: PSY 101.

311 INTRODUCTION TO SMALL GROUP PROCESSES (3) Examines basic principles of small group process through didactic and experiential approaches. Applications in various settings are examined.

312 DEVIANT BEHAVIOR AND SOCIAL PROCESS (3) Study of the psychological theories of deviant behavior. Major areas: sexual deviations, prostitution, juvenile delinquency, suicide, obesity, drug addiction, etc., and the various treatment modalities. Prerequisite: PSY 101.

313 PSYCHOLOGY OF INTERVIEWING (3) An introduction to theoretical, methodological and technical considerations of interviewing from a psychological perspective. Designed for those interested in the applications of interviewing in an industrial or organizational setting. Skill development is emphasized. 2 Lect., 1 Recit.

320 CHILD PSYCHOLOGY (3) Focuses on biological, social/emotional, and cognitive development. Also examines interaction between hereditary and environmental factors in growth and development of children. Can be taken with PSY 320L Lab Research.

321 ADOLESCENT PSYCHOLOGY (3) Begins with puberty and continues through transition to early adulthood. Looks at effects of changes of biological, social, and cognitive nature on adolescent attitudes, values and behaviors.

322 GERONTOLOGICAL PSYCHOLOGY (3) Examines effects of aging on individuals and their interactions with their environment. Emphasis on psychological adaptation to changes within the individual and society toward the aging process.

323 COGNITIVE AND MORAL DEVELOPMENT (3) Primary objective to acquaint students with basic concepts and constructs in cognitive and moral development. Focuses on current theories and research, e.g. Piaget, Kohlberg.

324 ADULT DEVELOPMENT (3) The study of psychological development during early and middle adulthood will be addressed. Emphasis is on the impact of social, personal, and biological factors on cognitive and personality development.

330 DRUGS AND BEHAVIOR (3) A comprehensive overview of drug use and abuse by individuals in American society. Review of major pharmacological, physiological and social variables, to provide the student with a framework for understanding drug consumption. Prerequisite: PSY 101.

331 PSYCHOLOGY OF CONSCIOUSNESS (3) Review of the psychology of consciousness and altered states with emphasis upon research and applications. Prerequisites: PSY 101 or equivalent and at least junior standing. 2 Lect., 1 Recit.

332 PSYCHOLOGY OF STRESS MANAGEMENT (2) The course provides an overview of stress and stress-related dysfunction. Techniques for prevention of stress are emphasized through demonstration and student participation. Prerequisites: PSY 101 or equivalent and at least junior standing or permission of instructor. 1 Lect., 1 Recit.

333 INTRODUCTION TO BIOFEEDBACK TECHNIQUES (1) Overview of the theory and therapeutic application of biofeedback technology to pain, psychosomatic, and other stress-related problems. Prerequisite: PSY 101, at least junior standing, or permission of instructor.

350 EXPERIMENTAL I:LEARNING (3) Surveys theories, techniques, and findings in the area of learning. Can be taken concurrently with PSY 351L, Laboratory Research in Psychology for 1 additional credit hour. Prerequisite: PSY 250 or by permission of instructor.

351 EXPERIMENTAL II:PERCEPTUAL PROCESSES (3) Basic phenomena of the senses, their physiological correlates and integration in complex perceptual judgments. Lecture and laboratory work. Can be taken concurrently with PSY 351L, Laboratory Research in Psychology for 1 additional credit hour. Prerequisite: PSY 250 or by permission of instructor.

410 INDUSTRIAL AND CONSUMER PSYCHOLOGY (3) Examines the application of psychology to business, industry, and marketing. Prerequisite: PSY 101.

421 DEATH AND DYING (3) An overview of the psychological aspects of death and dying in our society. Topics include attitudes toward and preparation for death, the terminally ill patient, funeral rituals and burial, mourning and grief, and suicide and euthanasia. Classroom material is supplemented by students' self-exploration and writing on feelings, attitudes, and beliefs about death.

430 THEORIES OF PERSONALITY (3) Considers major personality theories from psychoanalytic to humanistic and behavioral models. Papers and discussion concentrate on examining merits and limitations of various theories.

460 PHYSIOLOGICAL PSYCHOLOGY (3) Physiological aspects of behavior with special emphasis upon neurological structure and function. Lecture and laboratory work. Can be taken concurrently with PSY 460L, Laboratory Research in Psychology for 1 additional credit hour. Prerequisite: PSY 250 or by permission of instructor.

461 EXPERIMENTAL SOCIAL PSYCHOLOGY (4) Critical examination of research designs and methods for the study of problems in social psychology. Experimental projects with questionnaires, scales, interviews and observation methods, and with problems of sampling and data analysis. Prerequisite: PSY 101 and/or permission of instructor. 1 Lect., 3 Recit., 3 Lab.

462 BEHAVIOR MODIFICATION (3) An introduction to a variety of techniques for altering behavior based on learning principles. Can be taken concurrently with PSY 462L, Laboratory Research in Psychology for 1 additional credit hour. Prerequisite: PSY 101.

490 SENIOR SEMINAR (3) Psychology majors are presented the formal opportunity to explore professional functions of psychologists and human service workers in related roles as well as various areas of current interest in applied psychology. Prerequisites: Senior standing as a psychology major and permission of the instructor. 1 Lect., 2 Recit.

495 PREPROFESSIONAL EXPERIENCE (6-15) Provides practical experience and beginning skills to selected students majoring in psychology. The experience will focus on applied skills, community service and research work in settings appropriate to the students' interests and curriculum, including mental health and other human service programs, hospitals, personnel offices, and industrial or government agencies. Relates student theoretical learning to practical application. Prerequisite: Consent of the department chairperson based on the recommendations of the Department Preprofessional Committee. Application procedures, criteria for qualification, and obligations of the experience can be obtained from the department office.

496 RESEARCH APPRENTICESHIP (6-15) The Research Apprenticeship is designed to provide the student with intensive experiences in empirical research under close supervision. Qualified students will become involved in ongoing research projects, working along with experienced researchers. Students are encouraged to serve their apprenticeship at other campuses or institutional settings.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

LABORATORY RESEARCH IN PSYCHOLOGY (1) To provide students with a working knowledge of research methodology and skills in a variety of areas of psychological investigation. Students design and conduct research under instructor supervision. Can be taken concurrently with PSY 320, 350, 351, 460, and 462. Prerequisites: PSY 250, or equivalent and prior or concurrent course in experimental psychology.

REGIONAL PLANNING (RPL)

102 INTRODUCTION TO REGIONAL PLANNING (3) Regional planning as a tool for shaping the future man-made and natural environment. Students are introduced to man/land relationships that affect community well being, the tools used by government in managing these relationships for public benefit, and programs, politics, and activities required in recent planning legislation.

342 LAND-USE POLICY (3) An interpretive synthesis of the precepts and concepts of land-use that encourage and discourage geographic patterns on a changing landscape. Familiarizes the student with the economic, social, and political processes that are especially important for planning which is intended to move regions toward a particular goal.

352 RECREATIONAL LAND-USE PLANNING (3) An inquiry into the meaning, types, and demands of man's recreational activities. Planning emphasis will be given to the definition of problems and purposes and to the consideration of alternative resources for recreation, both physical and cultural.

460 TRANSPORT SYSTEMS (3) Analysis of the spatial principles and networks of transport systems, including factors of route location, theories of interaction, and the role of transport in space-economy.

480 TOPICAL SEMINARS (3) Discussions of selected problems, techniques, and research in the field of urban and regional planning.

494 PLANNING SEMINAR (3) Practical application of techniques learned in previous courses to typical planning problems.

496 PLANNING INTERNSHIP (12) The opportunity to apply knowledge and skills of planning. An experience in regional or corporate planning offices under the supervision of qualified planners. During this period, observation and conferences are scheduled by the student's advisor and evaluation is made of performance by the supervisory agency.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

RESPIRATORY THERAPY (BRP,RPH,RTH)

BRP

103 HUMAN ANATOMY (4) A structural approach to the human organ systems.

104 HUMAN PHYSIOLOGY (3) A functional approach to the human organ systems.

204 MICROBIOLOGY (3) Elements of medical microbiology with emphasis on non-socomial infections. 2 Lect., 2 Lab.

RPH

205 PULMONARY FUNCTION TESTING (3) This course was conceived to provide the student with a broader understanding of the physiologic principles underlying the respiratory system. The major focus is on measurement of respiratory parameters which are important in the diagnosis and management of diseases such as emphysema, asthma and pulmonary fibrosis. The course is divided into three major sections each of which deals with a specific lung function.

RTH

101 RESPIRATORY THERAPY I (3) An introduction to Respiratory Therapy. Oxygen and other gases used in respiratory therapy are studied and discussed. Methods of supplying and transporting gases are presented with emphasis on safety. Gas pressure and flow-regulating devices are presented in theory followed by student practice in the use of these devices. (Lectures plus field work)

102 RESPIRATORY THERAPY II (4) Introduction to the concept of humidity and various humidifying devices used for treatment of respiratory diseases. Aerosol therapy is presented first in theory and then in practice. Aerosal generators from jet capillary to ultrasonic devices are presented with the emphasis on application in treatment of patients. The student learns to operate environmental control devices. Methods of oxygen analysis are presented and practices. Prerequisite: RTH 101. (Lecture, laboratory)

103 RESPIRATORY THERAPY III (4) Instruction in cardiopulmonary resuscitation and management of patient in such an emergency. The student learns to operate simple and complicated ventilators and their effect on patients. Methods of sterilization are taught and practiced. Prerequisite: RTH 102. (Lecture, laboratory)

104 RESPIRATORY THERAPY IV (3) Students receive instruction in critical care monitoring procedures, pulmonary rehabilitation, home care, and new state-of-the-art respiratory care techniques. Students perform all clinical procedures of the staff respiratory therapist. Prerequisite: RTH 103. (Lecture, laboratory)

107 CLINICAL PRACTICUM I (1) Introduction of the student to the clinical area. Clinical instruction in oxygen, aerosol, hyperinflation, and chest physical therapies. Practice in pulmonary function test calcultions, maintenance and operation of arterial blood gas analyzers, blood gas sample handling and patient care, and equipment disinfection. (8 hours/week) Prerequisite: RTH 101 and concurrent registration in RTH 102.

108 CLINICAL PRACTICUM II (12) During the Clinical Practicum, the student will be assigned to the Robert Packer Hospital Respiratory Therapy Department for clinical practice of the theory and procedures they have been taught in the didactic portion of the program. This will include observation of procedures, and unsupervised application after the student has proven competent in the clinical area. The student will be required to keep a written log of his/her experience during this time and submit a weekly report to the educational coordinator of the program. Prerequisite: RTH 102, or equivalent. (All day)

109 CLINICAL PRACTICUM III (2) Application of respiratory care to the patient in the critical care unit. Emphasis is on the management of adult and pediatric patients requiring mechanical support of ventilation. In the laboratory, the student will perform all pulmonary function test and interpret the results. (16 hours/week) Prerequisite: RTH 108 and concurrent registration in RTH 103.

110 CLINICAL PRACTICUM IV (3) The student will perform all respiratory therapy procedures in the adult and neonatal intensive care units under supervision. The student will assist the pediatric physician with rounds and office hours. The student will participate in the day-to-day management of a Respiratory Therapy Department. (24 hours/week) Prerequisite: RTH 103 and RTH 109.

202 PHYSIOLOGY OF RESPIRATION (3) Regulation of oxygen consumption and carbon dioxide excretion by the central nervous system. Prerequisites: high school chemistry and algebra, or equivalent. 3 Lect., 3 Lab.

204 PHARMACOLOGY (3) Survey of pharmacological agents used in diagnosis and treatment of respiratory illness.

206 **INTRODUCTION TO DISEASE (2)** An elementary discussion of the disruption of life's healthful mechanisms. Topics include cellular and tissue response to injury, inflamation and repair, circulatory disease, immunopathology, neoplasia, genetic diseases, and infectious disease. The student is provided knowledge of the fundamental processes that underlie disease to facilitate better understanding of specific diseases encountered later. Prerequisites: RPH 103 and 104.

207 **PULMONARY DISEASE (1)** A discussion of common pulmonary disorders and their management. Topics include chronic obstructive pulmonary disease, restrictive pulmonary disorders, infectious pulmonary disease, pulmonary vascular disease, pulmonary pathology due to trauma, neonatal cardiopulmonary disease, and pediatric pulmonary disease. Prerequisite: RTH 206

SOCIOLOGY (SOC)

101 **INTRODUCTION TO SOCIOLOGY (3)** Introduction to the basic concepts, premises, and techniques involved in the scientific approach to the study of human societies. Analysis is made of selected aspects of social behavior at interpersonal, intergroup and societal levels of contemporary American Society.

121 **CONTEMPORARY SOCIAL PROBLEMS (3)** Survey of critical social problems confronting American society today. Their salient characteristics and the factors related to their creation and maintenance are explicated. ANH 101 or SOC 101 desirable but required.

232 **AMERICAN FAMILY SYSTEMS (3)** A study of the family throughout the life cycle including a brief historical overview of the family; emphasizes the life styles of contemporary families, influences of values in society upon family life and issues affecting individuals and families in their relationships. Prerequisite: SOC 101.

301 **ORGANIZATIONAL BEHAVIOR (3)** Social dimensions of work organizations including formal and informal interaction patterns as well as belief and symbol systems. Case studies of human problems in industry and field observation of selected work situations are involved. Prerequisite: ANH 101 or SOC 101.

302 **COMMUNITY (3)** Examination of various types of communities as social systems. Special attention is given to total institutions.

304 **PUBLIC OPINION (3)** Analysis of the role of public opinion in the political system. The process by which political opinions are formed, communicated and influence political behavior. The design and administration of a survey to measure political opinions. (PSC 304) Prerequisite: SOC 101.

305 **SOCIOLOGY OF RELIGION (3)** Analysis of the interrelationships between religion and other aspects of society particularly with reference to the problems of order and change. Prerequisites: SOC 101; ANH 101 desirable.

306 **INTERRACIAL SEMINAR (3)** Examination of personal and institutional aspects of interracial relationships. Emphasis is placed upon participative exploration through the use of controlled observations, simulations, role playing and similar techniques.

307 **SOCIAL RESEARCH I: RESEARCH DESIGN & DATA COLLECTION (3)** Introduction to the logic and techniques of the social research process. Special attention is given to attitude and opinion surveys and evaluation research problems. Prerequisite: SOC 101.

308 **SOCIAL RESEARCH II: ANALYSIS, INTERPRETATION, AND APPLICATIONS (3)** Techniques and procedures for processing social science data. Ability to develop and evaluate research reports and to judge how findings may be applied to improve social work practices are primary goals of the course. Previous training in statistics strongly recommended.

322 **SOCIOLOGY OF AGING (3)** Analyzes the influence of social interaction upon the process, stages, and problems of aging, particularly of older age. Student-conducted, oral history is utilized not only as a catalyst for intergenerational understanding and respect but also as a therapeutic social work technique designed to enhance the self image of older people by having them look back over their personal histories and by means of that process helping them to meet the human need to attain a self appreciation of the validity and significance of one's life.

351 POPULATION ECOLOGY (3) Studies the spatial aspects of world population, numbers, densities, and qualities, emphasizing the economic and social characteristics and mobility of the world's population. (GEG 351) Prerequisite: SOC 101.

415 AMERICAN VALUES IN CONFLICT (3) Analyzes American values and values' conflicts from a sociological perspective, placing such values and conflicts within a context of ideological orientation, ethnic and social class diversity, group interaction, socio-cultural change, and societal policy.

430 DEVIANCE: DELINQUENCY AND CRIME (3) Exploration of community and social bases of juvenile delinquency and crime. Provides an introduction to sociological theories of deviance and the new perspectives in criminology. Prerequisite: 6 hours in sociology or instructor's permission.

460 SOCIOLOGY OF HEALTH AND MEDICINE (3) Review of research and social issues bearing on health and medical practice in American society. Aspects covered include cross-cultural and social class comparisons; sick roles; professionalization process; hospital organization; ideological issues and public opinion.

SOCIOLOGY/ANTHROPOLOGY (S/A)

200 AMERICAN MINORITIES (3) An investigation of the individual and group processes by which the United States has been peopled and of the resulting racial, religious and ethnic communities. Consideration will be given to the similarities and differences in the values and experiences of a variety of groups and to the relative strength of tendencies toward assimilation and toward preservation of distinguishing characteristics. Prerequisite: SOC 101 or ANH 101.

250 THE FEMALE: A CROSS-CULTURAL VIEW (3) Follows the sociological movement of women in society from birth to death. The student will be given a broad perspective of women's traditional roles and how the changing of those roles affects both society and personal relationships. Contemporary women's issues will be viewed in the social context. Readings include case studies, literature, and sociological and anthropological studies.

321 FUTURISTIC SOCIETY (3) Investigation of the sociological impact of scientific technological changes. The potential for reorganization of social practices, alterations in values and belief systems, and for the creation of new social problems are considered.

340 DOCUMENTARY PHOTOGRAPHY (3) Exploring social relations with the camera. The use of photographs as tools of inquiry, documentation, and as data for social analysis. Problems related to cultural features affecting visual perception and reportage are treated. 2 Lect., 2 Lab.

350 SELECTED TOPICS SEMINAR (1-6) Review of a specialty are in anthropology or sociology or the study of a problem from an interdisciplinary position. Course may be repeated when topic is different. Prerequisites: upper division standing and consent of instructor.

410 SOCIOLOGICAL/ANTHROPOLOGICAL THEORY (3) An examination of the basic sociological and anthropological theories. The first part of the course focuses upon classic theories; the second part, contemporary theories. Functionalist, conflict, and interactionist theories are reviewed. Prerequisites: upper division standing; ANH 101, SOC 101, and at least one other S/A course in either sociology or anthropology.

412 RURAL FIELD STUDY (3) Intensive examination of a social setting. Instruction is focused on discerning patterns in social behavior and on imparting an socio-cultural understanding. Prerequisites: 6 hours in sociology and anthropology and/or consent of instructor. 2 Lect., 2 Lab. May be repeated.

421 URBAN SOCIETY (3) Intensive study of the social structure of urban communities. Dominant institutional features and problems of social integration and change receive primary attention. Prerequisites: 6 hours in sociology or anthropology and/or consent of instructor; SOC 302 desirable.

441 ORGANIZATIONAL INTERNSHIP (6-15) Supervised and evaluated participation in the regular activities of a business, government agency, or social service organization. In consultation with field instructor the student is expected to prepare an analysis of the organization's role system and its real or potential area of stress. Prerequisite: consent of instructor. SOC 301 strongly recommended.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

SOCIAL WORK (SWK)

101 HUMAN SERVICES (3) Survey of the field of human services. Introduction to the various professional roles, delivery systems and agencies. Emergent issues, needs, and trends affecting both public and private sectors will be reviewed.

200 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT (3) Focuses on selected and current cultural, sociological, economic, and biological factors that have an impact on the growth and development of the individual organism. The interrelationship of social, cultural, subcultural small groups and situational factors that influence social development.

241 INTRODUCTION TO SOCIAL WORK (3) Analysis of welfare activities as a social movement and of the dominant characteristics of the social welfare institution in America. Attention will be given to changing ideologies and to the professionalization of social work practice. Prerequisites: SOC 101, SOC 121 desirable.

252 SOCIAL WORK FIELD PLACEMENT I (3) Provides students with an opportunity to observe and participate with staff in social services and social service agencies actively engaged in providing services to an identified consumer group. Course work will normally be completed during the winter break.

315 (HST) EVOLUTION OF SOCIAL WELFARE IN AMERICA (3) Analyzes the socio-economic experience of America's 'Have-Nots,' ideological views of misfortune, social welfare policy and politics, and the evolution of social work.

349 SOCIAL WORK TECHNIQUES: CASE WORK (3) Theory and principles of social case work with individuals and families. The various roles and case work delivery systems are examined. Special emphasis on developing interviewing skills is made. Prerequisites: SWK 241; SOC 121.

350 SOCIAL WORK TECHNIQUES: GROUP WORK (3) Introduction to social group work techniques. The variety of groups and the appropriateness of various delivery systems will be studied. Direct experience in group processes is part of the course. Prerequisites: SWK 241; SOC 121 desirable.

451 SOCIAL PLANNING AND COMMUNITY ORGANIZATION (3) Selected cases of deliberate attempts at changing community practices are systematically examined. General patterns and recurrent problems involved in societal planning are examined. Prerequisite: junior standing and consent of instructor.

452 SOCIAL WORK FIELD PLACEMENT II (12) Is a professional semester of on the job study and skill training in a recognized social service agency providing services to various consumer groups. Opportunities are provided for the application of theory to helping processes with persons in need.

453 SENIOR SEMINAR (3) Is designed to prepare the graduating social worker to participate actively in the process of supervision used by professional social workers. Students are expected to be actively engaged in a helping relationship during the semester.

454 EMPLOYMENT COUNSELING (3) Introduction to the field of employment services. Techniques involved in assessing individual skills and job requirements as well as sources of manpower information and forecasting will be covered. Theories of job selection and career development are treated. Attention is given to the special problems of individuals undergoing retraining or rehabilitation, physically handicapped, and those having limited skills potential.

456 INTRODUCTION TO FAMILY COUNSELING (3) This course is a basic orientation to family counseling as one method of intervention for social dysfunction. Local social agency personnel and students in field placement are invited to participate. Role playing and video taping will be used to develop family-work skills.

SPANISH (SPA)

101 INTRODUCTORY SPANISH I (3) For students who have not previously studied Spanish. Fundamentals of grammar, intensive drill in pronunciation, comprehension and speaking. Two hours a week are required in the language lab.

102 INTRODUCTORY SPANISH II (3) Continuation of SPA 101. Prerequisite: SPA 101 or its equivalent. Two hours a week are required in the language lab.

201 INTERMEDIATE SPANISH I (3) Grammar review. Continuation of SPA 102. Prerequisite: SPA 102 or equivalent preparation.

202 INTERMEDIATE SPANISH II (3) Continuation of SPA 201. Prerequisite: SPA 201 or equivalent competency.

205 PRONUNCIATION AND PHONETICS (1) Analysis of Spanish phonetics. Emphasizes oral drill for English-speakers seeking to acquire Spanish accent. Prerequisite: SPA 102. 1 Lect., 1 Lab. Required of all Spanish majors.

210 SPANISH CONVERSATION (3) Training in oral self-expression and comprehension. Selected topics assigned for each class. May be taken concurrently with SPA 202 with consent of instructor. Either SPA 210 or 305 required of majors (May be repeated for credit one time). Prerequisite: SPA 201 or equivalent competency.

211 CONVERSATION AND SELECTED READINGS (3) Practice in reading comprehension and oral expression. Readings assigned and discussed in class with emphasis on vocabulary idioms. May be taken concurrently with SPA 202 with consent of instructor. (May be repeated for credit one time). Prerequisite: SPA 201 or equivalent preparation. 210 or 211 required of all Spanish majors.

305 ADVANCED SPANISH CONVERSATION (3) A more intensive study of idiomatic Spanish. Class conducted in Spanish. Prerequisite: SPA 202.

306 THE CULTURE AND CIVILIZATION OF SPAIN (3) History of customs and institutions of Spain. Emphasizes the effect of history on general culture and customs of present-day Spain. Prerequisite: SPA 202 or equivalent preparation.

307 THE CULTURE AND CIVILIZATION OF LATIN AMERICA (3) Studies the history, customs and politics of Latin America. Emphasizes general characteristics; race, religion, life style, etc. Prerequisite: SPA 202 or equivalent. Either SPA 306 or 307 required of Spanish majors.

320 ADVANCED SPANISH STRUCTURE (3) Study and application of Spanish structural patterns; emphasizes syntax. Prerequisite: SPA 202 or equivalent preparation. Required of all Spanish majors.

330 SURVEY OF SPANISH LITERATURE I (3) Examines the most important writers of Spain through 17th century; attention given to literary movements, historical backgrounds, style and form. Prerequisite: SPA 210 or 211 or equivalent competency. Required of all Spanish majors.

331 SURVEY OF SPANISH LITERATURE II (3) Continuation of SPA 330. Prerequisite: SPA 330 or equivalent preparation. Required of all Spanish majors.

340 SPANISH-AMERICAN LITERATURE I (3) Studies the major SpanishAmerican writers and movements through Realism and Naturalism. Prerequisite: SPA 202 or equivalent preparation.

341 SPANISH-AMERICAN LITERATURE II (3) Continuation of SPA 340 from Modernism to the present. Prerequisite: SPA 340 or equivalent preparation.

350 SPANISH LITERATURE IN TRANSLATION (3) Studies major works of Spanish and Latin American writers in English. Topics depend on student interest and availability of texts. Credit toward major or minor with permission of chairman.

370-380 FOREIGN STUDY (CREDIT ARRANGED) Foreign study is open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for SPA 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad. Students should consult the regulations for study-abroad, available in the Office of the Provost/Vice President for Academic Affairs.

400 SENIOR SEMINAR (CREDIT ARRANGED) Selected topics in Spanish and Latin American Literature. May be repeated for credit.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

SPECIAL EDUCATION (SPE)

100 PREPROFESSIONAL EXPERIENCE (3) Overview, introduction, and career requirements in the field emphasized. Orientation, observations, seminar attendance and field trips required.

101 EXCEPTIONAL PERSONS IN SOCIETY (3) Study of individuals who are exceptional in emotional, social, physical and intellectual development, including gifted and talented. Career opportunities in special education, rehabilitation and related areas. Observation in special education settings.

201 MENTALLY AND PHYSICALLY HANDICAPPED (3) Studies the etiology, characteristics, education, management and laws pertaining to children and adults with mental and physical handicaps. Prerequisite: SPE 101 or Instructor permission.

301 CURRICULUM DEVELOPMENTS & ADJUSTMENTS (3) Study of curriculum development, adjustments, methods, and materials in special educations. Considers IEP goals, school organization, grouping, planning, unit instruction, teachinglearning process, evaluating pupil progress and parent and other agency relationships. Prerequisite: SPE 201 or permission of the instructor.

302 DIAGNOSTIC AND CORRECTIVE TEACHING (3) Provides students with the skills necessary to diagnose and correct learning problems. Special attention is given to considerations related to the selection of appropriate formal tests (e.g. test bias). Selective diagnostic instruments are examined. Prerequisite: SPE 201 or permission of instructor.

303 OBSERVATION AND PARTICIPATION (3) Observation/participation in classroom setting. Emphasizing teaching-learning process, selecting, organizing and presenting lessons and materials. Projects and demonstrations required. Prerequisite: SPE 301.

304 PRACTICAL ARTS FOR EXCEPTIONAL PERSONS (3) Provides the student with experiences in test analysis and skill sequencing with emphasis on foods, woodworking, sewing and related homemaking skills. Prerequisite: Instructor's permission.

310 COMMUNICATION DISORDERS (3) Provide students with an introduction to the nature of specific speech, hearing and language disorders.

320 GIFTED AND TALENTED (3) Considers the characteristics of the gifted and talented. Teaching procedures, program types, curriculum materials and research are covered.

321 METHODS FOR THE GIFTED (3) Studies of curriculum, methods, materials, and resources in the education of the gifted and talented. Includes analysis and demonstration of leading materials and strategies. Case studies, field visits, and teaching simulations are provided. Prerequisite: permission of instructor.

330 CULTURAL DIVERSITY IN SPECIAL EDUCATION (3) Studies the definitions, causes, characteristics and education of children and youth from multicultural environments, considers problems in social-psychological context with implications for programs of improvement and research findings.

340 EDUCATION OF THE EMOTIONALLY DISTURBED (3) Surveys behavior disorders in children and youth. Considers emotional disturbance, social conflict, perceptual difficulties, hyperactivity, and related problems. Includes appropriate educational strategies and instructional materials for problem children. Observation and child study experiences included.

341 PSYCHO-EDUCATIONAL PROCESSES FOR BEHAVIOR DISORDERS (3) Covers the methods, materials and research appropriate for those behaviorally disordered individuals needing reeducation. Includes practicum. Prerequisite: SPE 340.

345 BEHAVIOR MODIFICATION WITH EXCEPTIONAL CHILDREN (3) Studies the implications of behavior theory as classroom teaching techniques. Conditioning of both academic skills and non-academic behaviors on an individual and group is stressed. Direct experience in modifying the behavior of exceptional children will be arranged.

355 SELECTED TOPICS (3) Field experience and/or group project work on selected current problems and interest areas in the field of special education. Students work individually with the instructor and periodically report back to the class on projects. Prerequisite: Instructor's permission.

360 EXCEPTIONAL CHILDREN IN REGULAR CLASSES (3) Develop an understanding of the rationale and procedures for mainstreaming exceptional children. Legal and philosophical rationales are examined and current developments in mainstreaming discussed. Major mainstreaming models will be studied and problems and issues covered.

375 RESIDENTIAL FACILITIES FOR THE HANDICAPPED (3) Explores different types of residential facilities, regulations, policies and standards. Emphasizes training for staff of community based and/or residential facilities.

377 ADULT HANDICAPPED (3) Studies adults with mental/physical handicaps. Emphasis on current trends, programs, and services. Reviews implications for helping professions over life span of handicapped individuals. Covers broad range of handicaps in adulthood including physical handicaps, learning disabilities, and emotional problems.

391 THE EXCEPTIONAL PERSON IN THE UNITED STATES AND EUROPE - A COMPARATIVE STUDY (3) Course is designed to provide a comparative study in the United States and Europe of the care, treatment and rehabilitation of exceptional persons from birth through adulthood. Study involves contact with families on both continents of exceptional individuals and professionals providing services. The hopes and frustrations of both groups with their counterparts in the U.S. should provide an enriching experience.

400 STUDENT TEACHING IN SPECIAL EDUCATION (12) Practice teaching under the supervision of master teachers in two different special classes as assigned by the department. Required for teacher education degree and certification.

401 TEACHING ELEMENTARY SPECIAL EDUCATION (3) Organizational procedures, curriculum practices and methods of teaching used in educating exceptional children in elementary school. Prerequisite: SPE 301.

402 TEACHING SECONDARY SPECIAL EDUCATION (3) Study for organizational procedures, curriculum practices and methods and techniques used in educating the exceptional children in junior and senior high schools. Emphasis on prevocational and work-study programs. Prerequisite: SPE 303 or permission of instructor.

403 TEACHING THE TRAINABLE RETARDED (3) Explores classification, diagnosis, organization, and programs. Emphasis on teaching materials and techniques. Prerequisite: SPE 303 or instructor's permission.

404 EARLY CHILDHOOD HANDICAP (3) Studies the needs of handicapped children in early childhood. Considers identification, multi-disciplinary educational planning, parent counseling, agencies and services. Observations and child study required. Prerequisite: instructor's permission.

410 PROFESSIONAL SEMINAR (3) Studies the spectrum of special education related professional responsibilities prior to field experience and/or accepting a professional position.

450 INTERNSHIP (12) Supervised field experience in a professional setting serving the handicapped.

476 NORMALIZATION AND COMMUNITY RELATIONS (3) Explores the principles of normalization and their application, community attitudes toward the handicapped, litigation and legislation, and strategies for public relations for the handicapped. Emphasizes the PASS/PASSING evaluation.

480-485 SPECIAL EDUCATION WORKSHOPS (1-6) Special workshop/seminars focusing on contemporary trends, topics, and problems in the field of education.

490 LEARNING DISABILITIES (3) Considers the problems of the learning disabled. Definition, etiology, diagnostic and remediation strategies, classroom management and research are considered.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

THEATRE (THT)

110 INTRODUCTION TO THEATRE (3) Survey of drama and the art and craft of the theatre. Does not necessarily include practice in applied theatre. Recommended for nonmajors. 3 Recitation.

200 DANCE WORKSHOP (2) (FOR TWO TIMES) Basic ballet techniques and other dance forms. How the human body can become an effective performing instrument. 4 Lab.

202 CREATIVE DRAMATICS (3) Theories and techniques of using creative dramatics with children and young adults. Valuable for the teacher in the school, for church and community groups. Recommended for nonmajors. 3 Recitation.

210 STAGECRAFT (3) Principles, procedures and techniques of theatrical production including: backstage organization and planning, construction, painting, rigging, and operation of scenic elements, and the use and operation of lighting equipment. Laboratories connected with the department's major productions. 3 Lect., 4 Lab.

211 THEATRE PRODUCTION WORKSHOP (1) (FOR 3 TIMES) Practical experiences in theatre production techniques with emphasis in scenery construction, painting, costumes, stage properties, lighting, publicity, and shop safety practices. Three hours in this course required of all theatre majors.

212 FUNDAMENTALS OF ACTING I (3) Basic techniques and methods of acting. Designed for the beginning actor. No previous acting experience is necessary. 1 Lect., 3 Lab.

213 FUNDAMENTALS OF ACTING II (3) Extension of THT 212. Emphasis on scene study, rehearsal and performance techniques. Prerequisites: THT 212 and consent of instructor.

214 MAKE-UP (1) Designed to familiarize the student with the basic principles and techniques of stage make-up. The various types of make-up and how to apply it in order to enhance a dramatic characterization. 1 Lect., 2 Lab.

215 SURVEY OF THEATRE HISTORY I (3) Development of the theatre from its primitive origins to the 19th century.

216 SURVEY OF THEATRE HISTORY II (3) Development of the theatre from the 19th century to recent movements in the 20th century. 3 Recitation.

300 ADVANCED ACTING I (3) Advanced course in the methods and presentations of acting styles, from the ancient Greeks to Shakespeare. Particular emphasis will be placed on performance. Prerequisites: THT 212, 213.

301 ADVANCED ACTING II (3) Continuation of THT 300. Restoration to the Modern Theatre.

310 FUNDAMENTALS OF DIRECTING (3) (FOR TWO TIMES) Basic principles and procedures of directing a play. Directing of workshop scenes and a one-act play presented to a public audience. Prerequisites: THT 210, 212, 215, 216 and consent of instructor. 1 Lect., 1 Recit., 2 Lab.

311 STAGE COSTUMING (3) Design and execution of costumes for the stage. Consideration of historical period, characterization, and various concepts for form and style. Prerequisite: THT 210 or consent of instructor. 2 Lect., 1 Lab.

312 STAGE LIGHTING (3) The history and basic techniques of lighting for the stage. Lighting designs and control are stressed. Participation in lighting major productions. Prerequisite: THT 210. 2 Lect., 1 Lab.

313 SCENE DESIGN (3) Study and practice in the principles and techniques of scenic design in the modern theatre. Knowledge and sense of the theatre and the relationship of the contribution of the scenic designer with those of the actor, director, and playwright. Prerequisite: THT 210, 317 or permission of instructor. 1 Lect., 1 Recit., 1 Lab.

315 SCENE PAINTING & ADVANCED STAGECRAFT (2) Techniques and practices of contemporary scenic arts. The laboratory time will allow the student to demonstrate a proficiency of the techniques studied. 1 Lect., 2 Lab.

316 THEATRE AND STAGE MANAGEMENT (3) Fundamental aspects of management designed for the serious student of theatre. Students shall have concentrated experiences in major college productions as well as responsibilities in box-office, and publicity. 3 Recitation.

317 DRAFTING AND SCENIC RENDERING (2) Techniques and conventions of drafting and full color rendering for the theatre technician-designer. 1 Recitation; 2 Lab. Prerequisite: THT 210.

318 ADVANCED LIGHTING (2) Investigation into contemporary practices, equipment and procedures for lighting all types of theatrical and entertainment events. Projects in the field. Prerequisite: THT 312. 2 Lecture; 2 Lab.

400 ADVANCED DANCE WORKSHOP (2) Advanced ballet technique and other dance forms. How the human body can become an effective performing instrument. Participation in a performance. (May be taken more than once for credit.)

410 (COM) PREPROFESSIONAL EXPERIENCE (6-15) Supervised and evaluated participation in varied settings provides practical application of theoretical principals.

414 THE MUSICAL THEATRE (3) History and performance techniques included.

417 PLAY STRUCTURE AND ANALYSIS (3) Analysis of selected plays and their significance in the development of the dramatic form. Studying the realization of social and cultural conditions in which the playwright lived and worked.

418 PLAYWRITING (3) Principles and theories of dramatic structure. Practice in writing for the stage. Prerequisites: THT 215,216, 310, 417 and/or consent of instructor.

450 (COM) SPECIAL PROJECTS (1-3) Initiated by the student to increase his/her knowledge in an advanced area not offered as a regular class. Intensive study under the guidance of a faculty member who has special expertise in that subject. Prerequisite: Permission of instructor.

470-471 SUMMER REPERTORY THEATRE LAB (6) Intensive practical work in the theatre. Student involvement in summer theatre productions. A student must enroll in THT 470 during the first summer session and THT 471 during the second summer session, for a total of 12 semester hours. Each may be repeated for a total of 24 semester hours over a two-year period.

480-481 SUMMER REPERTORY ACTOR'S LAB (6) Intensive practical work in the performance are of the theatre. Student involvement in actual summer theatre productions. A student must enroll in both 480 and 481 for a total of 12 semester hours. Each may be repeated once for a total 24 semester hours over a two-year period.

497 INDEPENDENT STUDY (1-3) (See description in section on Academic Policies.)

TRAVEL AND TOURISM (TRT)

102 INTRODUCTION TO TRAVEL-TOURISM (3) Surveys the broad nature of travel-tourism with an emphasis on the interrelationships between traveller need-desire and travel fulfillment.

220 NORTH AMERICAN DESTINATIONS & ATTRACTIONS (3) To acquaint the student with North American and West Indian travel destinations, attractions, and attractiveness. Study of the marketing and promotion of these destinations.

221 WORLD-WIDE DESTINATIONS AND ATTRACTIONS (3) To acquaint the student with the world-wide travel destinations, attractions, and attractiveness. Study of the marketing and promotion of these destinations.

222 TRAVEL-TOURISM SITE DEVELOPMENT (3) An analysis of natural/manmade tourism resources of value in travel tourism. The development of resources into viable facilities will be considered in the contexts of changing socioeconomic and political considerations.

300 THE TRAVEL CONSUMER (3) Course provides students with a comprehensive understanding of the traveller-tourist characteristics, psychographics, and the external influences that impact on potential markets for travel-tourism products.

312 INTERNATIONAL TOURISM (3) Studies the international tourist and the ramifications of such tourism to both sending and host countries.

410 (HEC 310) TOPICAL SEMINAR IN TRAVEL-TOURISM (3) Seminar topics vary to offer exposure to the multifaceted nature of travel-tourism. Examples include: the travel agency, wholesale tour development, issues in contemporary travel and tourism, and hospitality.

420 **TRAVEL-TOURISM PROJECT SEMINAR (3)** Provides students the opportunity to perform individual research, problem solving, and decision making in practical situations related to travel-tourism.

430 **TOURISM SUPPLIERS AND WHOLESALERS (3)** A comprehensive study of travel-tourism suppliers, especially accomodations, food services, and the ground operators followed by a study of the wholesale travel business including personal experience in package/tour development and marketing.

460 **PASSENGER TRANSPORT (3)** An analysis of spatial principles and transport systems and networks; including factors of route location, theories of interaction, and the role of all forms of passenger transport in the travel-tourism space economy.

480 **CONTEMPORARY ISSUES IN TRAVEL & TOURISM (3)** A survey of the contemporary issues that are faced by the travel and tourism industry. Students become familiar with the issues through intensive study of the popular and trade press.

494 **INTERNSHIP (12)** Offers the opportunity to apply skills and knowledge of travel-tourism under the supervision of professionals. Two individually designed projects are required. Prerequisite: Permission of instructor.

497 **INDEPENDENT STUDY (1-3)** (See description in section on Academic Policies.)

X-RAY TECHNOLOGY (XRT)

XRT

101 **X-RAY TECHNOLOGY I (3)** An introduction to radiology professional ethics and medical terminology. The student also will begin evaluating radiographic images.

102 **X-RAY TECHNOLOGY II (3)** A basic introduction to imaging equipment and radiation protection methods. Students will learn positioning considerations for the upper extremity anatomy and deal with the concept of patient care.

103 **X-RAY TECHNOLOGY III (5)** Students will become acquainted with the methods of film processing and the principles of radiation biology and radiation protection. Emphasis will be placed on positioning of the lower extremity anatomy. Radiologic consideration of procedures using contrast media and film evaluation will be discusses.

104 **X-RAY TECHNOLOGY IV (3)** This course will acquaint the student with the principle of radiographic exposure. Emphasis will be placed on radiographic positioning of the skull, spine, shoulder and pelvic girdles. Students will continue to study the evaluation of radiographic images and discuss introductory radiographic concepts during the seminar.

105 **X-RAY TECHNOLOGY V (3)** This course will familiarize the student with the radiographic pathology of medical and surgical diseases and the techniques of radiologic special procedures. Consideration of examinations of the chest, abdomen and alimentary canal will be introduced. Students will continue to evaluate the radiographic image.

106 **X-RAY TECHNOLOGY VI (4)** The purpose of this course is to review the knowledge and cognitive skills underlying the intelligent performance of the major tasks typically required of an entry-level staff technologist. Students will also become familiarized with the basic concept and technique of radiologic quality assurance.

203 **X-RAY PHYSICS (3)** A course designed to introduce and provide a background for the more technical aspect of radiological physics. The student is introduced to x-ray therapy and is provided with a background for understanding the principles and practices for radiology. Through the course the student gains and understanding of the electromagnetics spectrum.

301 **CLINICAL PRACTICUM I (2)** The main purpose of this course is to familiarize the student with the proper use of modern diagnostic x-ray equipment. Initially, the student will receive a general orientation regarding the hospital facilities and policies. Students will then perform, while under the direct supervision of a registered radiographer, examinations of the upper extremities.

302 CLINICAL PRACTICUM II (2) This course will allow the students to continue to practice the skills learned in the previous clinical practicum, and expand their clinical education into newer areas. Students will perform, while under the direct supervision of a registered radiographer, examinations of the lower extremity. Patient contact and responsibilities for the student will increase, since this practicum is scheduled during a summer session.

303 CLINICAL PRACTICUM III (2) The students will become involved with the more advanced examinations of the vertebral column and skill. Training in the modalities of Nuclear Medicine, Computerized Tomography, and Ultrasound will be achieved by a two week rotation through each area. Students will begin demonstrating traumatic examination skills during the evening practicum in the Emergency Room X-Ray Department.

304 CLINICAL PRACTICUM IV (3) Students will add to their repertoire of advanced examinations, examinations of the chest, abdomen, biliary system, and gastrointestinal tract. Rotation through the Special Procedure Area will occur during this course. An introduction to radiographic film quality control will be received during a rotation through the X-Omat area. Students may utilize a clinical elective for further specialization in any are of radiology.

305 CLINICAL PRACTICUM V (2) Students will have the opportunity to perform the radiographic examinations that are performed by entry level Radiographers. Clinical assignments involving the quality assurance testing of diagnostic x-ray equipment will be given at this time. Patient contact and responsibility will increase as students perform, under indirect Radiographer supervision, during this summer session.

MANSFIELD'S SCHOLARSHIP PROGRAM

Mansfield Foundation Scholarships: The Mansfield Foundation Scholarships are supported by a grant made by the Mansfield Alumni Association and individuals who contributed to the general scholarship fund. The number of awards varies from year to year depending upon the amount of money available. Scholarships are in the amount of $1000 per academic year.

The Mike Howland Scholarship: The Mike Howland Scholarship is supported by a grant made by the Mansfield Alumni Association and individuals who contribute to the general scholarship fund. The award is in the amount of $1000 per academic year. The scholarship usually is given to a student who resides in Tioga County, Pennsylvania.

The Baumann-Stahley Scholarship: The Baumann-Stahley Scholarship is supported by the income from a trust created by Marguerite Baumann and Margaret B. Stahley. The award is in the amount of $1000 per academic year.

The AFSCME Scholarship: The AFSCME Scholarship is supported by grants from the local unit AFSCME and the Mansfield Foundation. The amount of the award is $1000 per academic year.

The James J. Simonis Scholarship: The Simonis Scholarship is supported by grants from the Mansfield Library staff and the Mansfield Foundation. The amount of the award is $1000 per academic year.

The Warren L. Miller Scholarship: The Warren L. Miller Scholarship is supported by a grant made by Dr. Mildred Menge Miller and the Mansfield Foundation. The award is in the amount of $1000 per academic year.

The Charles V. Darrin Scholarship: The Charles V. Darrin Scholarship, in memory of David D. Dye, is funded by the income from a trust created by M. Darrin. The amount of the award will be determined at a later date. The award is given to a student who is accepted for enrollment as a music major.

The Elinor Schipbanker Scholarship: The Elinor Schipbanker Scholarship is supported by the income from a trust fund created by Elinor Schipbanker. The amount of the award is $1000 per academic year. The award is given to a student who is accepted for enrollment as an art major.

The Honors Program Scholarship: The Honors Program Scholarship is supported through the Mansfield Foundation by individuals who contributed to the general scholarship fund. The amount of the award is $1000 for the academic year. The award is given to a student who has been accepted into the Honors Program.

The General Scholarship Guidelines are used to select the recipients of the above scholarships.

The Jonathan G. March Scholarship: The Jonathan G. March Scholarship is supported by the income from a trust fund created by James White. The award is in the amount of $1000 per academic year. The recipient should be an incoming student from Tioga County, Pennsylvania. The student selected for the award is to be distinguished more by effort and commitment to higher education goals than by past academic achievement.

Hartley B. Dean Scholarships: The Hartley B. Dean Scholarships are funded by the income from a trust created by Hartley B. Dean '18. The Hartley B. Dean Scholarship Guidelines are used to implement the awards.

The Blossburg National Bank Scholarship: The Blossburg Bank Scholarships are supported by the income from a trust fund created by that bank. Three (3) $400/year awards are given to students of North Penn High School who attend Mansfield University. The applications are reviewed by a faculty committee at North Penn. That committee's recommendations are forwarded to the Scholarship Committee for final selection. It is intended that the awards will be renewed for each of the student's four college years.

The Richard Howe Scholarship: The Richard Howe Scholarship is supported by grants from the faculty of the BCS Department and The Mansfield Foundation. The award is $1000 for the academic year. A committee of BCS faculty members review the applications and forward their recommendations to the Scholarship Committee for final selection. The award is given to a student who is currently enrolled at Mansfield University.

The Presser Scholarship: The Presser Scholarship is supported by grants from the Presser Foundation and The Mansfield Foundation. The award is $1500 for the academic year. A committee of music faculty members review the applications and forward their recommendations to the Scholarship Committee for final selection. The award is given to a student who is currently enrolled as a music major at Mansfield University.

The APSCUF Scholarship: The APSCUF Scholarship is supported by grants from the local chapter of APSCUF and The Mansfield Foundation. The award is $1000 for the academic year. A committee of APSCUF members reviews the applications and forwards their recommendations to the Scholarship Committee for final selection. The award is given to a student who is currently enrolled at Mansfield University.

The All Residence Hall Council Scholarship: The All Residence Hall Council Scholarship is supported by grants from the All Residence Hall Council and the Mansfield Foundation. The amount of the award is $1000 for the academic year. The award is given to students who are currently enrolled at Mansfield University. The recipient is selected by the Scholarship Committee.

The Faculty Senate Scholarship: The Faculty Senate Scholarship is supported by grants from the Faculty Senate and the Mansfield Foundation. The amount of the award is $1000 per academic year. The recipient is selected from among applicants who are currently enrolled at Mansfield University.

The H.W. Colegrove Scholarship: The H.W. Colegrove Scholarship is supported by the income from a trust fund created by H.W. Colegrove. Two (2) $1000/year grants, are given to women students who are residents of Tioga County, Pennsylvania. This scholarship is awarded for each of the student's four years. The recipient is selected by the Scholarship Committee.

The Martin Luther King Jr. Scholarship: The Martin Luther King Jr. Scholarship is supported through the Mansfield Foundation by individuals who contributed to the general scholarship fund. The amount of the award is $1000 for the academic year. The General Scholarship Guidelines are used to select a black freshman as the recipient.

The Howard Halloran Memorial Scholarship: The Howard Halloran Memorial Scholarship is supported by income from a trust fund created by Thomas Halloran. The award is in the amount of $1000 for the academic year. Preference in awarding the scholarship will be given to a resident of Potter County who has financial need. If no qualified applicant from Potter County is available preference will be given to a student meeting the General Scholarship Guidelines who has financial need.

The Thomas and John Halloran Scholarship: The Thomas and John Halloran Scholarship is supported by income from a trust fund created by Thomas Halloran. The award is in the amount of $1000 for the academic year. Preference in awarding the scholarship will be given to a resident of Potter County who has financial need. If no qualified applicant from Potter County is available, preference will be given to a student meeting the General Scholarship Guidelines who has financial need.

The Jean S. Kreuscher Scholarship: The Jean S. Kreuscher Scholarship is supported by income from a trust fund created by Jean S. Kreuscher. Five (5) $1000 awards will be given for the 1985/86 academic year. The awards will be given to students who have been accepted for enrollment as music majors. A committee of music faculty will review applicants and make recommendations and forward recommendations to the Scholarship Committee for final selection.

UGHN
AUDITO

PERSONNEL

Board of Governors

Dr. Syed R. Ali-Zaidi	Mrs. Anne Jackson
Mr. Todd A. Baney	Dr. James L. Larson
Mr. Murray Dickman	Mr. Floyd M. Mains
Mr. Fitz E. Dixon Jr. Chairman	Mr. Sean C. Mullen
Ms. Rebecca Gross	Mrs. Eve Murphy
Dr. Joseph Haller	Dr. Charles J. Potter
Mr. Guy Holliday	Mr. J. Edwards Smith
Mr. James A. Hughes	Dr. Margaret A. Smith

Chancellor's Office

Dr. James H. McCormick	Chancellor
Dr. M. Emily Hannah	Vice Chancellor for Academic Policy & Planning
Mr. Wayne G. Failor	Vice-Chancellor for Finance & Administration
Mr. Sam B. Craig	Executive Deputy

Council of Trustees

Mr. Ralph Antrim Jr.	Wellsboro
Mr. Robert J. Beirne	Athens
Dr. Marcella Hyde	Canton
Mr. Robert M. Jones	Blossburg
Mr. Kenneth B. Lee	Eagles Mere
Mr. Lewis B. Lee	Harrisburg
Dr. Andrew Michanowicz	Pittsburg
Mr. Howard J. Smith Jr.	Troy
Mrs. Ann O. Wilcox	Wellsboro
Mrs. Ila H. Wiley, Chairman	Nelson

ADMINISTRATIVE OFFICERS AND STAFF

President's Office

Mr. Rod C. Kelchner	President of the University
Mr. Ronald Costello	Director of Alumni Affairs & Development

Academic Affairs

Dr. George Mullen	Provost/Vice President for Academic Affairs
Mrs. Celeste Sexauer	Acting Director of Continuing Education & Summer Sessions
Mr. John J. Monoski III	University Registrar & Director of Administrative Academic Services
Mr. John J. Abplanalp	Director of Admissions and Enrollment Services
Dr. Enrico Serine	Director of Financial Aid
Mr. Frank Kollar	Director of Center for Academic Development, Career Development & Placement
Dr. Larry Nesbit	Director of Libraries
Mr. David Russell	Director of Equal Education Opportunity Program
Mr. Gary Ingerick	Director of Computer Center

Administration

Mr. Richard Deihl	Director of Personnel/Facilities Planning
Mrs. Connie Shaw	Director of Business Office
Mr. Curt Tofts	Controller
Mr. David Umble	Director of Buildings & Grounds
Mr. Ivan Wilson	Director of Purchasing

Student Affairs

Mr. Joseph Maresco	Vice President for Student Affairs
Mr. Michael Lemasters	Director of Residence Life
Mr. Carmen Bianco	Assistant Director of Residence Life
Mrs. Mary Beth Eggleston	Assistant Director of Residence Life
Mr. David Newcombe	Assistant Director of Residence Life
Ms. Michele Ryan	Assistant Director of Residence Life
Mr. Hugh Schintzius	Assistant Director of Residence Life
Mr. Clarence Crisp	Director of Student Activities & Assistant to the President

Public Relations

Mr. Dennis Miller	Director of Public Relations

ACADEMIC FACULTY AND UNIVERSITY ADMINISTRATION

ART DEPARTMENT

STEPHEN T. BENCETIC (1951), Professor
B.S., Youngstown State University (1948); M.A., University of Iowa (1949); M.F.A., University of Iowa (1951); Ed.D., Pennsyl,vania State University (1959)

JAMES G. CECERE (1967), Professor; Chairperson
B.S., SUNY at New Paltz (1958); M.F.A., Pratt Institute (1962); D.Ed., Pennsylvania State University (1966)

ERNEST W. FROMBACH (1968), Associate Professor
B.S.E., Indiana University of Pennsylvania (1952); M.Ed., Indiana University of Pennsylvania (1966)

THOMAS HERALD LOOMIS (1971), Assistant Professor
B.F.A., Wayne State Univeristy (1966); M.A., Wayne State University (1974)

SAMUEL DEE THOMAS (1968), Associate Professor
B.S., Indiana University of Pennsylvania (1952); M.Ed., Pennsylvania State University (1959)

DALE A. WITHEROW (1966), Assistant Professor
B.S., Indiana University of Pennsylvania (1961); M.F.A. Instituto Allende, Mexico (1964)

STANLEY F. ZUJKOWSKI (1969), Assistant Professor
B.S., Kutztown State University (1965); M.S. Alfred University (1970)

BIOLOGY DEPARTMENT

ANTHONY J. BECKER JR. (1958), Assistant Professor
B.S., Mt. Saint Marys College (1970); M.S. West Virginia University (1977); Ph.D., West Virginia University (1982)

DAVID C. FLESCH (1977), Associate Professor
B.S., University of Wisconsin (1967); Ph.D., Iowa State University (1977)

RALPH C. GOFF (1969), Associate Professor
B.S., Bonaventure University (1963); Ph.D., St. Bonaventure University (1970)

LAWRENCE R. HONEYWELL (1968), Associate Professor, Chairperson
B.S., Rutgers University (1954); Vm.D., University of Pennsylvania (1961)

KENNETH A. MEYER (1972), Associate Professor
B.A., SUNY at Oneonta (1966); M.A., University North Carolina-Chapel Hill (1969); Ph.D., University North Carolina-Chapel Hill (1972)

VINCENT PAUL SMICHOWSKI (1965), Professor
B.S., Mansfield State College (1955); M.Ed., Pennsylvania State University (1957); D.Ed., Pennsylvania State University (1971)

RICHARD W. SODERBERG (1980), Assistant Professor; Director of Fish Culture
B.S., University of Wisconsin (1972); M.S., Auburn University (1980); Ph.D., Auburn University (1983)

BUSINESS ADMINISTRATION DEPARTMENT

JAMES W. CARLSON (1984), Associate Professor
B.S., Mansfield State College (1965), M.A., Bucknell University (1967), Ed.D., Pennsylvania State University (1977)

EBRAHIM GHODS (1983), Assistant Professor
B.S., Youngstown State University (1976); M.B.A., Youngstown State University (1978)

ANDREW G. HAVALCHAK (1980), Assistant Professor
B.S. Pennsylvania State University (1972); M.B.A., Syracuse University (1975)

GOPALAN KUTTY (1984), Assistant Professor
Bachelor of Commerce, University of Calicut (1971); Master of Commerce, University of Calicut (1974); M.B.A., Katholieke Universiteit Leuven (1981)

MARY JANE MITCHELL (1985), Assistant Professor
B.S., University of Utah (1975); M.P.A., University of Texas at Austin (1980)

FREDERICK B. PIELLUSCH (1966), Professor
B.S., Concordia College (1964); M.A., University of Oregon (1968); Ph.D., University of Nebraska (1974)

PAULA F. WELCH (1980), Assistant Professor
B.S., Cornell University (1969); M.B.A., Syracuse University (1980)

CENTER FOR ACADEMIC DEVELOPMENT

TONDELAYA K. BAYLOR-AYEWOH (1978), Assistant Professor
B.A. West Virginia State (1974); M.A., West Virginia College of Graduate Studies (1975)

WILLIAM S. CHABALA (1976), Instructor, Director of Advising/Counseling
B.S., Kutztown State College (1971); M.Ed., Kutztown State College (1976)

W. MICHAEL JOHNSON (1974), Associate Professor, Counseling, Career Development
B.S., Indiana University of Pennsylvania (1951); M.M.Ed., University of Colorado (1960), Ph.D., University of Northern Colorado (1968)

JANICE M. KENNEDY (1969), Assistant Professor, Director of Advising Center and International Student Advisor
B.S., Mansfield State Teachers College (1946); M.S., Cornell University (1966)

FRANCIS J. KOLLAR (1966), Associate Professor, Director of Center for Academic Development, Career Development and Placement
B.S., St. Vincent College (1964); M.Ed., Millersville State College (1971)

SUSAN M. KRIEGER (1978), Assistant Professor, Counseling, Career Development and Placement
B.A., University of New Hampshire (1972); M.A. Trenton State College (1974)

DAVID H. RUSSELL (1975), Assistant Professor; Director of Equal Education Opportunity Program
B.S., Mansfield State College (1963)

STERLING SALTER (1972), Assistant Professor, Counseling, Career Development and Placement
B.A., Clark University (1966); M.A., University of Utah (1969)

CELESTE B. SEXAUER (1975), Assistant Professor
B.S.Ed., Edinboro State College (1971); M.Ed., Edinboro State College (1973)

CHEMISTRY DEPARTMENT

ARNOLD GEORGE (1968), Professor; Chairperson
B.S., University of Massachusetts (1964); Ph.D., University of Massachusetts (1969)

RAMASWAMY GNANASEKARAN (1984), Assistant Professor
B.S., University of Madras (1974); M.S., University of Madras (1976); Ph.D., Oklahoma State University (1984)

WILLIAM F. SCHMID (1965), Professor
B.A., University of Rochester (1951); Ph.D., University of Colorado (1960)

JACK D. SIDLER (1967), Professor
B.S.; Geneva College (1961); Ph.D., SUNY at Buffalo (1966)

COMPUTER SCIENCE DEPARTMENT

CLARENCE L. KRANTZ (1976), Associate Professor; Chairperson
B.S.E.E., Bucknell University (1967); M.E.E., Cornell University (1968)

HAROLD E. SCHWARTZ (1971), Associate Professor
B.S., University of Maryland (1967); M.A. University of Maryland (1970)

MARY L. ROBINSON-SLABEY (1972), Professor
B.S., Geneseo State College (1964); Ed.M., University of Buffalo (1970); Ed.D., University of Buffalo (1972)

THEODORE M. SLABEY (1972) Associate Professor
A.B., Washington and Jefferson College (1948); M.E.A., The George Washington University (1965)

EDUCATION DEPARTMENT

CRAIG J. CLELAND (1981) Assistant Professor
B.S., Millersville State College (1975); M.Ed., Shippensburg State College (1978); Ph.D., University of Maryland (1980)

JANET M. FULLER (1980), Assistant Professor
B.S., Mansfield State College (1973); M.Ed., Mansfield State College (1976)

RALPH GARVELLI (1968), Associate Professor; Director of Education Field Experiences
B.S., Indiana University of Pennsylvania (1961); M.Ed., Indiana University of Pennsylvania (1965)

NORMAN GEORGIC (1981), Associate Professor
B.S., University of Pittsburgh (1951); M.Ed., University of Pittsburgh (1958)

JOHN C. HEAPS (1959), Professor
B.S., Lock Haven State College (1953); M.Ed., Pennsylvania State University (1956); D.Ed., Pennsylvania State University (1967)

RICHARD A. HECK (1970), Associate Professor
B.A., Westminster College (1962); M.S., Westminster College (1964); M.Ed., University of Pittsburgh (1966); Ed.S., University of Pittsburgh (1967); Ed.D., University of Miami (1971)

VERNE G. JEFFERS (1968), Professor
B.S., State University College at Potsdam (1950); M.S., State University College at Potsdam (1953); D.Ed., SUNY at Albany (1966)

ROBERT A. JOHNSON (1969), Professor; Director of Cooperative Education
B.S., Mansfield State College (1959); M.S.T., Cornell University (1962); Ph.D., Cornell University (1968)

LUTHER W. PFLUGER (1969), Professor; Chairperson
B.S., University of Texas (1953); M.Ed., North Texas State University (1955); Ed.D., Teachers College, Columbia University (1960)

ROBERT C. PUTT (1967), Professor
B.S., SUNY at Genesceo (1960); M.S., SUNY at Fredonia (1965) D.Ed., Pennsylvania State University (1977)

RONALD E. REMY (1965), Associate Professor; Director, Audio Visual Center
B.S., California State College (1958); M.A., West Virginia University (1961)

ROBERT E. SWINSICK (1968) Professor
B.S., Mansfield State College (1957); M.S.Ed., St. Bonaventure University (1960); D.Ed., Pennsylvania State University (1968)

SUE C. WHISLER (1981), Assistant Professor
B.S., Ball State University (1971); M.A., Ball State University (1974); Ph.D., Indiana University (1982)

DENNIS J. WYDRA (1969) Associate Professor
B.S., Bloomsburg State College (1965); M.Ed., Temple University (1969); D.Ed., Temple University (1975)

ENGLISH DEPARTMENT

LARRY T. BIDDISON (1969), Professor
B.A., Texas A. & I. University (1958); M.A., Louisiana State University (1963); Ph.D., Louisiana State University (1969)

ELLEN BLAIS (1968), Associate Professor
B.A., Indiana University (1966); M.A., University of Chicago (1967); Ph.D., SUNY at Binghamton (1978)

WILFRED A. BLAIS (1964), Associate Professor
B.A., Brown University (1952); M.A., University of Connecticut (1956)

JAY A. GERTZMAN (1968), Professor
B.S., University of Pennsylvania (1961); M.A., Columbia University (1963); Ph.D. University of Pennsylvania (1972)

JAMES Y. GLIMM (1968), Professor
B.A., The College of the Holy Cross (1964); Ph.D., University of Texas (1969)

IRA E. HINDMAN JR. (1967), Professor
B.A., Roberts Wesleyan College (1955); M.A., Stetson University (1964); Ph.D., Louisiana State University (1970)

KATHLEEN B. HINDMAN (1967), Associate Professor
B.A., Valparaiso University (1965); M.A., Louisiana State University (1967); Ph.D., Pennsylvania State University (1980)

BERNARD J. KOLOSKI (1964), Professor
B.S., East Stroudsburg State College (1959); M.A., University of Pennsylvania (1964); Ph.D., University of Arizona (1972)

WINIFRED NEFF (1966), Associate Professor
B.S., Lock Haven State College (1949); M.Ed., Pennsylvania State University (1965)

WALTER G. SANDERS (1967), Associate Professor; Chairperson
A.B., Washington University (1957); M.S., University of Wisconsin (1958)

LARRY K. UFFELMAN (1969), Professor
B.A., Illinois Wesleyan University (1960); M.A., University of Illinois (1962); Ph.D., Kansas State University (1969)

FOREIGN LANGUAGE DEPARTMENT

WILLIAM F. BOGART (1967), Associate Professor; Chairperson
A.B., Hope College (1959); A.M., Middlebury College (1964)

BERNARD C. CLARK (1984), Assistant Professor
B.A., Oxon (1959); M.A., Oxon (1964); M.A. Simon Fraser University (1968)

JOSEFINA I. ESPINO (1966), Assistant Professor
Doctor en Pedagogia, Universtiy of Havana (1945); Doctor en Filosofia y Letras, University of Havana (1955)

DAVID A. IOVINO (1967), Assistant Professor
B.S., Duquesne University (1965); M.A., Duquesne University (1971)

GEOGRAPHY AND GEOLOGY DEPARTMENT

DAVID J. DARBY (1972), Associate Professor
B.S. Mansfield State College (1965); M.S., Pennsylvania State University (1970); Ph.D., Pennsylvania State University (1973)

RUSSELL L. DODSON (1983), Assistant Professor
B.S., Wayne State University (1972); M.A., Michigan State University (1974); Ph.D., Michigan State University (1985)

PHILIP B. LUCE (1967), Associate Professor; Chairperson
B.A., Colby College (1957); M.S., New York University (1962)

ROGER TRINDELL (1970) Professor; Chairperson
B.A., Montclair State College (1958); M.A., University of Colorado (1960); Ph.D., Louisiana State University (1966)

HEALTH AND PHYSICAL EDUCATION DEPARTMENT

ARTHUR P. DeGENARO (1969), Professor
B.S. Kent State University (1955); M.Ed., Kent State University (1962); Ph.D., Ohio State University (1969)

WAYNE H. EVANS (1981), Assistant Professor
B.S., Lock Haven State College (1977); M.Ed., Pennsylvania State University (1980)

DAISY E. HERNDON (1977), Assistant Professor
B.S., The Texas Woman's University (1968); M.A., The Texas Woman's University (1970)

ROBERT S. IRWIN III (1970), Assistant Professor; Chairperson
B.S., Wake Forest University (1963); M.Ed., University of Toledo (1964)

ROGER N. MAISNER (1976), Assistant Professor
B.S., Eastern Michigan university (1973); M.A., Michigan State University (1976)

ETHEL M. MOSER (1962), Assistant Professor
B.S., East Stroudsburg State College (1949); M.S., Bucknell University (1953)

BERNARD S. SABOL (1969), Associate Professor
B.S., Pennsylvania State University (1963); M.A., Allegheny College (1969)

HENRY A. SHAW (1966) Associate Professor
B.S. Lock Haven State College (1959); M.S., Ithaca College (1969)

MARYLOU P. SHAW (1967), Assistant Professor
B.S., Texas College of Arts & Industries (1960); M.S., Ithaca College (1972)

EDWARD W. WILSON (1966), Associate Professor
B.A., Baldwin-Wallace College (1957); M.S., West Virginia University (1964)

EDWARD J. WINROW (1976), Assistant Professor
B.S., SUNY at Buffalo (1963); M.A., Ball State University (1969)

HISTORY DEPARTMENT

PAUL C. HAFER (1967), Associate Professor
B.S., Shippensburg State College (1957); M.Ed., Pennsylvania State University (1961); Ed.D., Ball State University (1972)

ELENA LUKASZ (1964), Associate Professor
B.A., University of Chicago (1959); M.A., University of Chicago (1962)

RAYMOND F. PASKVAN (1968), Associate Professor
B.A., Carleton College (1960); M.A., University of Minnesota (1963); Ph.D., University of Minnesota (1971)

ROBERT W. UNGER (1965), Professor; Chairperson
B.A., Olivet Nazarene College (1957); B.A., University of the Phillippines (1961); M.A., Ball State University (1963); Ph.D., Ball State University (1968)

HOME ECONOMICS DEPARTMENT

STEPHEN D. BROWN (1974) Assistant Professor
B.S., Eastern Illinois University (1970); M.S., Eastern Illinois University (1972)

MARY ANN GAYDOS (1964), Professor
B.A., College Misericordia (1953); M.Ed., Pennsylvania State University (1960); Ph.D., Pennsylvania State University (1974)

SANDRA LINCK (1971), Professor; Chairperson
B.S., Northwest Missouri State University (1959); M.S. University of Kansas (1964); D.Ed., Pennsylvania State University (1983)

SHIRLEY S. LINDSEY (1979), Assistant Professor
B.S., University of Maryland (1950); M.S., Mansfield State College (1980); D.Ed., Pennsylvania State University (1985)

CHARLENE S. PLOWCHA (1978), Assistant Professor
B.S., Indiana University of Pennsylvania (1968); M.Ed., Indiana University of Pennsylvania (1977)

JUNE D. RUDY (1968), Assistant Professor
B.S., Mansfield State College (1960); M.Ed., Pennsylvania State University (1971)

MARY LEE TROWBRIDGE (1968), Assistant Professor
B.S., Mansfield State College (1959); M.Ed., Pennsylvania State University (1971)

LIBRARY

LESERICK B. ACHEY (1970), Assistant Professor
B.A., Lebanon Valley College (1969); M.S., Drexel University (1971)

M. MARTHA DONAHUE (1971), Associate Professor
B.A., Centre College of Kentucky (1958); M.A., Indiana University (1961)

HOLLY ANN GARDINIER (1981), Assistant Professor
B.A., SUNY at Oneonta (1973); M.L.S., SUNY at Geneseo (1975); M.A., Eastman School of Music (1982)

ALINE GARRETSON (1986), Assistant Professor
B.S., Roanoke College (1948); M.S., Michigan State University (1967); Ph.D., Michigan State University (1971); M.L.S. Rutgers (1985)

LARRY L. NESBIT (1970), Director of Libraries
B.S., Indiana University of Pennsylvania (1966); M.Ed., Indiana University of Pennsylvania (1967); M.L.S., University of Pittsburgh (1970); D.Ed., Pennsylvania State University (1979)

PATRICIA A. NEAL (1985), Instructor
B.A., California State University at Fullerton (1975); M.L.S., University of Washington, (1984)

SHUI-HSIEN PIEN (1970), Associate Professor
B.A., Nationa Tawain Normal University (1958); M.L.S., University of Pittsburgh (1965); M.Ed., Elmira College (1975)

GARY J. ROSSI (1976), Associate Professor
B.A., SUNY at Buffalo (1973); M.L.S., SUNY of Geneseo (1976); M.A., Middlebury College (1977)

FRANCES L. SEABORN (1985), Instructor
B.S., James Madison University (1982); M.L.S., George Peabody College for Teachers of Vanderbilt University (1985)

MATHEMATICS DEPARTMENT

ROBERT J. BRIDGMAN (1963), Professor
B.S., Western Michigan University (1952); M.A., University of Michigan (1956)

OWEN A. CLARK (1966), Associate Professor; Chairperson
B.S., Pennsylvania State University (1950); M.A.T., Brown University (1961)

WELLINGTON C. ENGEL (1969), Associate Professor
B.S., Kansas State College of Pittsburgh (1963); M.S. University of Kansas (1969)

ROBERT E. HEVERLY (1963), Associate Professor
B.S., Lock Haven State College (1952); M.S., Bucknell University (1958)

JACQUES D. MUMMA (1967), Associate Professor
B.A., Franklin & marshall College (1965); M.A., Pennsylvania State University (1967)

JOHN R. WALKER (1970), Professor
B.S., SUNY at Albany (1962); M.S., Syracuse University (1966); M.A. Syracuse University (1967); Ph.D., Syracuse University (1970)

STANLEY E. WERNER (1967), Associate Professor
B.S.E., Millersville State College (1962); M.A., Pennsylvania State University (1965)

WILLIAM B. WETHERBEE (1965), Associate Professor
B.S., Mansfield State College (1951); M.S., University of Illinois (1959); M.S., Bowling Green State University (1965)

MILITARY SCIENCE DEPARTMENT

THOMAS H. ELLER, JR. (1984), Professor of Military Science, Lieutenant Colonel,
B.A., The Citadel (1966); M.Ed., Tulane University (1975)

DALE W. SANDERS (1985), Assistant Professor of Military Science, Major
B.A., Ouachita Baptist University (1970)

SCOTT M. HENNE (1984), Assistant Professor of Military Science, Captain
B.S., Norwich University (1978)

LEE A. MCGAY (1984), Instructor, Military Science, Master Sergeant

DONALD P. FYSTRO (1984), Administrative Assistant, Specialist Fifth Class

MUSIC DEPARTMENT

DAVID J. BORSHEIM (1972), Associate professor
B.A., College of St. Thomas (1968); M.A.T., College of St. Thomas (1971); M.M., University of Cincinnati College - Conservatory of Music (1973)

E. EDWARD BROWN (1971) Professor
B.M., Shenadoah Conservatory of Music (1958); M.M., Converse College (1964)

DAVID J. DICK (1966), Associate Professor
B.S., Ithaca College (1953); M.M. Butler University (1957)

KATHRYN M. DYCK (1967), Assistant Professor
B.S., Kutztown State College (1943); B.M., Westminster Choir College (1947); M.A., University of Pennsylvania (1963)

ELIZABETH G. EIDENIER (1978), Assistant Professor
B.M., Florida State University (1971); M.M., Florida State University (1974)

H. MICHAEL GALLOWAY (1980), Assistant Professor
B.M.E., Baldwin-Wallace College (1966); M.M., New England Conservatory (1968)

WILLIAM M. GOODE (1962), Professor
B.S., Auburn University (1944); B.M., Birmingham Southern College (1947); M.M., Birmingham Southern College (1949); Ph.D., Indiana University (1965)

WALTER K. HILL (1967), Professor; Chairperson
B.M., Oberlin Conservatory (1957); M.E., Eastman School of Music (1961); A.M.D., Eastman School of Music (1966)

MARJORIE B. KEMPER (1965), Associate Professor
B.M.E., University of Evansville (1953); M.M.E., Indiana University (1959)

RICHARD L. KEMPER (1965), Associate Professor
B.M., University of Evansville (1953); M.M., Indiana University (1960)

JOHN B. LITTLE (1968), Professor
B.M., Southern Methodist University (1944); M.M., Eastman School of Music (1949); D.M.A., Eastman School of Music (1965)

STEPHEN P. McEUEN (1977), Assistant Professor
B.M., Northeast Missouri State University (1974); B.M.E., Northeast Missouri State University (1974); M.M., The Julliard School (1976)

JOHN R. MONAGHAN (1969), Assistant Professor
B.S., Duquesne University (1957); M.M., Duquesne University (1970)

KONRAD L. OWENS (1966), Assistant Professor
B.A., Oberlin College (1964); B.M., Oberlin College (1964); M.M., Michigan State University (1966)

J. WAYNE RUSK III (1963), Associate Professor
B.M., College of Music, Cincinnati (1954); M.M., College Conservatory of Music, Cincinnati (1956)

ANGELINE SCHMID (1962), Associate Professor
B.M., Eastman School of Music (1952); M.M., University of Colorado (1957)

DONALD A. STANLEY (1966) Professor
B.S., Ohio State University (1959); M.F.A., Ohio University (1964)

RICHARD N. TALBOT (1967), Professor
B.A., University of Northern Iowa (1958); M.M.E., Drake University (1961)

JACK M. WILCOX (1956), Professor
B.S., Mansfield State College (1947); B.M., University of Michigan (1951); M.M. University of Michigan (1951)

CHARLES E. WUNDERLICH (1964), Professor
B.S., Eastman School of Music (1957); M.M., University of Michigan (1958); Ph.D., University of Michigan (1961)

JOYCE C. WUNDERLICH (1965), Professor
B.M., Houghton College (1949); M.S., Ithaca College (1961); D.A., Carnegie-Mellon University (1980)

EDWIN E. ZDZINSKI (1966), Professor
B.S., SUNY at Fredonia (1953); M.A. Columbia University Teachers College (1956); Ed.D., Columbia University Teachers College (1969)

PHILOSOPHY DEPARTMENT

STEPHEN H. BICKHAM (1970), Professor; Chairperson
B.A., University of Dayton (1964); M.A., Southern Illinois University (1965); Ph.D., Southern Illinois University (1970)

IRA NEWMAN (1972), Associate Professor
A.B., Columbia College (1962); M.A., Columbia University (1971); Ph.D., University of Connecticut (1984).

THOMAS K. YOUNG (1980), Assistant Professor
B.A., University of Wisconsin (1975); M.A., Southern Illinois University (1977); Ph.D , Southern Illinois University (1982)

PHYSICS DEPARTMENT

JOHN DOWLING (1970), Professor
B.S., University of Dayton (1960); M.S., Arizona State University (1962); Ph.D., Arizona State University (1964)

MICHAEL STEFANOV (1968), Associate Professor
B.A., Mansfield State College (1976); M.A., Kent State University (1978), Ph.D., Kent State University (1983)

MICHAEL E. VAYANSKY (1966), Associate Professor
B.S., California State College (1963); M.A., Kent State University (1965)

POLITICS AND ECONOMICS DEPARTMENT

SEK LAI (1984), Assistant Professor
B.S., SUNY at Buffalo (1977); M.A., SUNY at Buffalo (1979); Ph.D., SUNY at Buffalo (1984)

MARIE F. LITTLE (1968), Associate Professor; Chairperson
B.A., Connecticut College (1947); M.A., University of New Hampshire (1950); A.B.D., Washington University (1968)

ROBERT E. MURPHY (1965), Associate Professor
B.S., California State College (1958); M.A., Villanova University (1964)

WILLIAM A. YACOVISSI (1976), Assistant Professor
B.S., Towson State University (1969); M.U.R.P., Morgan State University (1974); M.A., Pennsylvania State University (1982)

PSYCHOLOGY DEPARTMENT

RICHARD N. FEIL (1968), Professor
B.A., Loyola University (1961); M.A., Catholic University of America (1963); Ph.D., Catholic University of America (1968)

JOEL E. GRACE (1969), Professor
B.A., Franklin & Marshall College (1961); M.A., University of Waterloo (1964); Ph.D., University of Waterloo (1966)

PETER A. KELLER (1974), Professor; Chairperson
A.B., Franklin & Marshall College (1967); M.S., University of Miami (1970); Ph.D., University of Miami (1972)

J. DENNIS MURRAY (1978), Associate Professor
B.A., Syracuse University (1970); M.A., University of Rochester (1974); Ph.D., University of Rochester (1975)

THOMAS D. PRUTSMAN (1969), Professor
A.B., Stetson University (1954); M.S., University of Miami (1955); Ph.D., Florida State University (1961)

CHARLES F. SEIDEL (1967), Professor
B.A., Lycoming College (1957); M.A., Temple University (1959); Ph.D., University of Liverpool, England (1962)

SOCIOLOGY, SOCIAL WORK AND CRIMINAL JUSTICE ADMINISTRATION

DANIEL P. KASAMBIRA (1973), *Associate Professor*
B.S., Illinois Wesleyan University (1964); M.S.W., University of Michigan (1966); Ph.D., Case Western Reserve University (1975)

GALE P. LARGEY (1970), *Professor*
B.A., St. Vincent College (1966); M.A., SUNY at Buffalo (1968); Ph.D. SUNY at Buffalo (1972)

FLOYD W. LILEY, JR. (1983), *Assistant Professor*
B.A., Central Methodist College (1970); B.S., Northeast Missouri State University (1972); M.S., Central Missouri State University (1975); E.D.S., Central Missouri State University (1978); Ph.D., University of Southern Mississippi (1981)

ANN MABE (1980), *Associate Professor; Chairperson*
B.S., Virginia Commonwealth University (1971); M.S., Virginia Commonwealth University (1978); M.A., University of Virginia (1978); Ph.D., University of Virginia (1979)

A. THOMAS J. MATTHEWS (1971), *Professor*
B.A., Washington State College (1948); M.A., Washington State College (1950); Ph.D . Cornell University (1953)

HOWARD J. MILLER (1977), *Assistant Professor*
B.A., University of Missouri (1972); M.S.W., Washington University (1974)

LAURANCE W. MILLER (1977), *Associate Professor*
B.A., Susquehanna University (1961); M.S.W., University of Pittsburgh (1964); D.Ed., Pennsylvania State University (1985)

MARK A. ROBARGE (1981), *Associate Professor*
B.A., SUNY at Albany (1973); M.A., SUNY at Albany (1974); Ph.D., SUNY at Albany (1979)

EDWARD S. RYAN (1975) *Associate Professor*
A.B., Fordham College (1966); M.P.A., City University of New York (1968); M.A., SUNY at Albany (1975); Ph.D., SUNY at Albany (1978)

ROBERT H. WOOLEY (1971), *Associate Professor*
B.S., University of Wisconsin (1966); M.S., University of Wisconsin (1967); Ph.D., University of North Carolina (1977)

SPECIAL EDUCATION DEPARTMENT

EMERY R. BRENIMAN (1968), Professor
B.S., California State College (1955); M.Ed., Westminster College (1957); D.Ed., Pennsylvania State University (1967)

NANCY C. BRUBAKER (1971), Assistant Professor
B.S., Clarion State College (1961); M.Ed., Bloomsburg State College (1969)

JOHN T. KOVICH (1966), Associate Professor
B.S., Bloomsburg State College (1962); M.S., Pennsylvania State University (1965); M.Ed., Lehigh University (1970)

RICHARD L. SHICK (1964), Professor
B.S., Lock Haven State College (1958); M.Ed., Pennsylvania State University (1961); D.Ed., Pennsylvania State University (1967)

THOMAS F. STICH (1969), Professor; Chairperson
B.S., Lock Haven State College (1962); M.Ed., Pennsylvania State University (1965); D.Ed., Pennsylvania State University (1969)

RONALD B. STRAUB (1975), Associate Professor
A.B., Dartmouth College (1969); M.Ed., University of Deleware (1972); Ph.D., Pennsylvania State University (1980)

JOYCE A. ZINCHINI (1972), Associate Professor
B.S., Edinboro State College (1961); M.Ed., Indiana University of Pennsylvania (1969)

SPECIAL PROGRAMS

DAVID H. RUSSELL (1971), Assistant Professor; Coordinator of Special Programs
B.S., Mansfield State College (1963)

SPEECH, COMMUNICATION AND THEATRE DEPARTMENT

MICHAEL D. CRUM (1984), Assistant Professor
B.S., Southeast Missouri State University (1976); M.F.A., University of Southern Mississippi (1984)

ARLYNE M. GARRITY (1976), Assistant Professor
B.A., Emerson College (1965); M.A., University of Southern California (1967)

A. VERNON LAPPS (1968), Professor; Chairperson
A.B., University of Michigan (1954); M.A., Wayne STate University (1965); Ph.D., Ohio University (1973)

MICHAEL D. LEIBOFF (1968), Assistant Professor
B.A., University of Arizona (1966); M.A., University of Nebraska (1967)

KENNETH A. MUSSELMAN (1970), Assistant Professor
B.S., Bloomsburg State College (1964); M.S., Bloomsburg STate College (1970); M.S.Ed., Bucknell University (1972)

ARLIE M. PARKS (1966), Professor
B.S., SUNY at Fredonia (1955); M.A., Pennsylvania State University (1962); Ph.D., Florida State University (1977)

JOHN K. TILLINGHAST (1970), Professor
B.S., Ithaca College (1951); M.F.A., Yale University (1954); Ph.D., Indiana University (1964)

ADMINISTRATIVE STAFF

CARMEN BIANCO (1979), Assistant Director of Residence Life
B.S., Duquesne University (1971); M.Ed., Mansfield State College (1979)

JAMIE L. BUTSKO (1981), Assistant Director, Admissions
B.S., Slippery Rock State College (1980)

DENISE F. CARTER (1981), Admissions Counselor, Admissions
B.A., Mansfield State College (1978)

CLARENCE J. CRISP (1976), Director; Student Activities
B.A., University of Wyoming (1974); M.A., University of Wyoming (1975)

MARY BETH EGGLESTON (1984), Assistant Director of Residence Life
MS Ed., Elmira College, (1984)

MICHAEL LEMASTERS (1981), Director of Residence Life
B.A., West Liberty State College (1975); M.A., Bowling Green State University (1976)

DENNIS R. MILLER (1980), Director of Public Relations
B.A., Mansfield State College, (1971); M.A., Elmira College (1980)

JOHN J. MONOSKI, III (1978), Registrar and Director of Administrative Academic Services
B.A., Ohio Wesleyan University (1966); M.A., Duke University (1968)

DAVID A. NEWCOMBE (1981), Assistant Director of Residence Life
B.A., University of Pittsburgh (1978); M.S., Shippensburg State College (1981)

MICHELE RYAN (1985), Assistant Director of Residence Life
B.A., State University College, Oswego (1980); M.S., State University College, Oneonta (1985)

CARL A. STEINGRABER (1981), Admissions Counselor, Admissions
B.S., Mansfield State College (1971); M.S., Bucknell University (1985)

CHRISTOPHER W. VAUGHN (1981), Assistant Director of Financial Aid
B.S., Shippensburg State College (1974); M.Ed., Shippensburg State College (1976)

MARY JANE WATKINS (1973), Admissions Counselor, Admissions
B.A., Mansfield University (1985)

UNIVERSITY ADMINISTRATORS

JOHN J. ABPLANALP (1979), Director of Admissions and Enrollment Services
B.S.E., Mansfield State College (1972); M.Ed., Mansfield State College (1978)

ROD C. KELCHNER (1964), President
B.S., Bloomsburg State College (1956); M.S., Bucknell University (1963)

JOSEPH R. MARESCO (1972), Vice President for Student Affairs
B.S., State University College at Brockport (1967); M.S., SUNY at Albany (1968)

GEORGE H. MULLEN (1969), Provost/Vice President for Academic Affairs
B.A., Rutgers University (1956); M.S., Syracuse University (1958); Ph.D., Syracuse University (1962)

NON-DEPARTMENTAL FACULTY

A. HUGH SCHINTZIUS (1972), Assistant Professor, Director of Recreation
Ed.B., University of Buffalo (1966); M.Ed., West Chester State College (1972)

ENRICO A. SERINE (1970), Associate Professor; Director of Financial Aid
B.S., Bloomsburg State College (1967); M.Ed., Shippensburg State College (1970); Ed.D., University of Arkansas (1976)

EMERITI

JOHN BAYNES	Dr. of Musical Arts, Boston University
MARION S. BENNETT	M.A., Columbia University
LEONARD K. BEYER	M.S., Cornell University
RUTH BILLINGS	M.A., Teachers College, Columbia University
GEORGE P. BLUHM	D.Ed., Pennsylvania State University
MARGARETTA M. BONE	Ed.D., New York University
FLORENCE BORKEY	M.A., Teachers College, Columbia University
THOMAS COSTELLO	M.S., Bucknell University
J. BRUCE DAVIS	M.Ed., Pennsylvania State University
JOHN DOYLE	Ph.D., New York University
BERTRAM FRANCIS	M.A., Northwestern University
CLARISSA R. GORDON	M.A., New York University
MARY E. HELTIBRIDLE	Ed.D., George Washington University
ENID L. HENDRICKS	M.S., University of Boston
PETER W. HILL	A.M., Bradley University
CLARENCE L. HUNSICKER	D.Ed., Pennsylvania State University
EUGENE JONES	M.M., Eastman School of Music
KATHERINE KELLER	M.S., Pennsylvania State University
JEANNE KELLERMAN	M.Ed., Pennsylvania State University
ALFRED E. KJELGAARD	M.Ed., Pennsylvania State University
CATHERINE M. KUSTER	M.Ed., Pennsyvlania State University
CHRISTINE S. LEWIS	M.M., Northwestern University
S. MANFORD LLOYD	M.A., Teachers College, Columbia University
LEON LUNN	M.Ed., St. Bonaventure University
HELEN LUTES	M.Ed., Pennsylvania State University
EDNA P. MARSH	M.A., Teachers College, Columbia University
RUTH MARSH	M.A., Teachers College, Columbia University
RICHARD MASON	M.Ed., University of New Hampshire
MILDRED M. MILLER	D.Ed., Pennsylvania State University
ELIZABETH MORALES	M.A., Teachers College, Columbia University
CLARENCE R. MUTCHLER	D.Ed., Pennsylvania State University
MARGARET O'BRIEN	M.A., McGill University, Montreal, Canada
MARYON F. POWELL	M.A., Teachers College, Columbia University
LAURENCE SNIVELY	Ed.D., University of Colorado
RICHARD WILSON	D.Ed., Pennsylvania State University

ADJUNCT FACULTY

CRAIG BARRINGER	Elmira, New York
JAMES L. BENDERD	Sayre, Pennsylvania
JAMES MEADE	Wellsboro, Pennsylvania
ROBERT MOST	Mansfield, Pennsylvania
DONALD R. WEAVERD	Sayre, Pennsylvania

ACADEMIC CALENDAR 1986-87

FALL SEMESTER

Registration	August 26
Classes Begin	August 27
Labor Day Break	September 1
Last Day To: Add Courses	September 10
Last Day To: Submit Pass/Fail Option	September 10
Last Day To: Submit Credit-By-Examination	September 10
Last Day to Drop Courses	October 1
Mid-Semester Grades Due	October 15
Fall Break	October 16-17
Pre-Registration for Spring Begins	October 20
Thanksgiving Break (Begins at 8:00 A.M.)	November 26
Classes Resume (8:00 A.M.)	December 1
Classes End (10:00 P.M.)	December 12
Reading Period	December 13-14
Final Examinations	December 15-18
Semester Grades Due (4:00 P.M.)	December 22
Commencement	January 10
Academic Standards Review Board	January 14-15

SPRING SEMESTER

Registration	January 19
Classes Begin	January 20
Last Day To: Add Courses	February 4
Last Day To: Submit Pass/Fail Option	February 4
Last Day To: Submit Credit-By-Examination	February 4
Last Day to Drop Courses	February 25
Mid-Semester Grades Due	March 6
Spring Break (Begins at 8:00 A.M.)	March 9
Classes Resume (8:00 A.M.)	March 16
Pre-Registration for Fall Begins	March 16
Easter Break (Begins at 8:00 A.M.)	April 16
Classes Resume (8:00 A.M.)	April 21
Classes End (10:00 P.M.)	May 8
Reading Period	May 9-10
Final Examination	May 11-14
Semester Grades Due (4:00 P.M.)	May 15
Commencement	May 17
Academic Standards Review Board	May 26-27

CATALOG INDEX

Absence Policy 28
Academic Affairs 194
Academic Dismissal 32
Academic Faculty 195
Academic Integrity Statements 28
Academic Minor 27
Academic Policies 21
Academic Probation 32
Academic Programs 37
Academic Progress 15
Academic Standards Review Board 33
Academic Standards Review Board Procedures 33
Accreditation B
Actuarial Science 39
Adding A Course 28
Adjunct Faculty 208
Administration 194
Administrative Officers and Staff 194
Administrative Staff 207
Admissions 5
Admissions Categories 5
Admissions Fees 10
Admissions — Requirements for 5
Advanced Placement 35
Advising/Counseling Center 19
Application Procedures (Freshmen) 6
Application Procedures (Transfers) 6
Art Department 195
Art Education (K-12) 98
Art History 40
Art Studio 41
Athletic Training 42
Auditing of Courses 26
Benchmark Courses 21
Biology 43
Biology (7-12) 106
Biology Department 195
Board of Governors 193
Broadcasting 44
Business Administration Department 196
Business Administration 45
Calendar 209
Career Development and Placement Services 20
Center for Academic Development 19
Center for Academic Development Department 196
Certification 9
Certification Fee 12
Chancellor's Office 193
Change of Major 28
Chemistry 46
Chemistry (7-12) 107
Chemistry Department 197
Class Standing 30
Clothing and Textiles 47
College-Level Examination Program 35
Community Building Fee 11
Computer and Information Sciences — Computer Science Emphasis 48
Computer and Information Sciences — Information Systems Emphasis 68
Computer Science Department 197
Continuing Education 9
Correspondence B
Council of Trustees 193
Course Descriptions 121
Accounting 123
Anthropology 123
Art 124
Art Education 126
Art History 126
Astronomy 127
Biology 128
Business Administration 130
Chemistry 131
Communications 133
Computer and Information Sciences 135
Cooperative Education 136
Criminal Justice Administration 136
Economics 138
Education — Elementary 138
Education — Secondary 141
English 142
Fish Culture 144
French 144
Geography 146
Geology 147
German 149
Health and Physical Education 150
History 151
Home Economics 154
Honors 158
Interdisciplinary Studies 158
Journalism 158
Management 159
Mathematics 159
Military Science 162
Music 163
Music — APM 166
Music — ENM 168
Music Therapy 169
Philosophy 170
Physics 172
Political Science 173
Public Administration 173
Psychology 175
Regional Planning 178
Respiratory Therapy 178
Sociology 180
Sociology/Anthropology 181
Social Work 182
Spanish 183
Special Education 184
Theatre 186
Travel and Tourism 187
X-Ray Technology 188
Course Load 30
Credit by Examination 34
Credit be Examination Fee 12
Credit by Examination — Procedures for 34
Credit for Military Service 27
Criminal Justice Administration 49
Dean's List 35
Delinquent Accounts 13
Dietetics 50
Diploma Fee 11
Dropping A Course 28
Early Decision 6
Early Studies Program 6
Earth and Space Science 51
Earth and Space Science (7-12) 108
Education Department 197
Elementary Education 99
English 52
English (7-12) 109
English Department 198
Environmental Science — Biology 53
Environmental Science — Geography 54
Environmental Science — Geology (B.A.) 55
Environmental Science — Geology (B.S.) 56
Equal Education Opportunity Program 20
Exceptional Persons 57
Faculty Emeriti 208
Fees and Charges 10
Financial Aid 14

Fish Culture 58
Food Service Management 59
Foreign Language Department 199
French 60
French (K-12) 100
Full-Time Instructional Fees 10
General Education Overview 22
General Education Distribution Electives 24
General Education Distribution Requirements 23
General Education Group Choices 22
  Group I — Humanities 23
  Group II — Languages 23
  Group III — Sciences 23
  Group IV — Mathematics 23
  Group V — Social Science 24
General Education Program, Philosophy of 21
General Education Requirements 22
General Education Special Rules 25
General Science Certification 110
General Studies 61
Geography 62
Geography and Geology Department 199
Geology — Bachelor of Arts 63
Geology — Bachelor of Science 64
German 65
German (K-12) 101
Grade Changes 32
Graduate Studies 9
Graduation Outlook Form 27
Graduation Requirements 21
Group Requirements 23
Health and Education Fee 11
Health and Physical Education Department 199
Health Insurance 19
Health Services 18
History 66
History Department 200
History of University 8
Home Economics Department 200
Home Economics Education (K-12) 103
Honors 35
Honors Program 33
Housing/Food Services Fees 11
Human Relations 67
Incomplete Grades 32
Independent Study 26
Intercollegiate Athletics 18
Interdisciplinary Studies 26
International Students 20
International Studies 69
Instructional Fees 10
Internship Program 27
Intramural Recreation 18
Journalism 70
Late Registration or Late Payment Fee 11
Learning Resource Center 20
Liberal Studies 71
Library 201
Maintenance of Matriculation 29
Mansfield United Campus Ministry 18
Mathematics 73
Mathematics (7-12) 111
Mathematics Department 201
Maximum Hours Accepted in Transfer 8
Medical Technology 74
Military Science 202
Military Science Program 75
Miller Analogies Test Fee 12
Minimum Academic Requirements 32
Miscellaneous 12
Motor Vehicles 19
Music 76
Music Department 202
Music Education (K-12) 104
Music History/Literature 77
Music in Performance — Instrumental 78
Music in Performance — Keyboard 79
Music in Performance — Voice 80
Music Merchandising 81
Music Program Special Requirements 6
Music Theory-Composition 82
Music Therapy 83
Non-Accredited Colleges 8
Non-Departmental Faculty 207
Off-Campus Study 35
Opportunities for the Superior Student 33
Orientation 17
Part-Time Campus Employment 15
Part-Time Instructional Fees 10
Pass/Fail Policy 29
Permission Procedures To Take Courses at Another Institution 30
Personnel 193
Personnel Administration 84
Petition 29
Philosophy 85
Philosophy Department 203
Physics 86
Physics (7-12) 112
Physics Department 203
Physics/Mathematics (7-12) 113
Policies 19
Policy on Admission of Transfer Students 7
Political Science 87
Politics and Economics Department 204
Pre-Engineering/Physics 88
President's List 35
President's Office 194
Program Requirements 25
Program Variance 26
Psychology 89
Psychology Department 204
Public Relations Office 194
Public Relations 90
Readmission of Former Students 8
Refund Policy 12
Regional Planning 91
Repeating a Course 31
Residence Life 17
Residence Requirements 17
Respiratory Therapy 92
ROTC 12
Scholarships 17
Scholarships Available 190
Scholastic Standards and Requirements 31
Second Baccalaureate Degree 27
Secondary Education Programs (7-12) 105
Social Studies Comprehensive Program (7-12) 114
Social Work 93
Sociology/Anthropology 94
Sociology/Social Work and Criminal Justice Administration Department 205
Spanish 95
Spanish (K-12) 102
Special Education Department 206
Special Education (K-12) 115
Special Programs 206
Special Students 30
Special Study 26
Speech 96
Speech, Communication and Theatre Department 206
Student Activities 18
Student Activity Fee 12
Student Affairs 194

Student Government Association 18
Student Life and Services 17
Student Organizations 18
Student Union 18
Summary of Typical Full-Time Undergraduate Expenses Per Semester 13
Summer Development Program (E.E.O.P.) 5
Summer School 9
Summer Sessions Instructional Fees 10
Teacher Preparation Programs 97
Testing and Counseling Fee 11
Theatre Arts Management 118
Theatre — General 116
Theatre — Technical 117
Time Shortened Degree 26
Transcript Fee 12
Transcripts 30
Transfer Credit 7
Tansfer Evaluation — Grades 7
Transfer Evaluation Semester Hours 7
Travel and Tourism 119
Undergraduate Admissions to Graduate Courses 36
University Administration 195
University Administrators 207
Variable Semester Hour Courses 26
Veterans Benefits 15
Withdrawal From the University 29
Withdrawing From a Course 28
X-Ray Technology 120

Mansfield University is committed to assuring equal opportunity to all persons regardless of race, color, religious creed, affectional or sexual preference, handicap, ancestry, national origin, union membership, age or sex, in accordance with State and Federal laws including Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. Please direct inquiries to Affirmative Action Officer, Personnel Office, Room 200 South Hall, Mansfield University, Mansfield, PA 16933, or call 717-662-4320.

Section 504 of the Rehabilitation Act of 1973 provides that "no otherwise qualified handicapped individual shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Section 504 prohibits discrimination against handicapped individuals in recruitment, testing, admissions, and does not permit discrimination after being admitted to a college/university. Mansfield University is committed to make the necessary adjustments in order that handicapped students are able to fulfill academic requirements and to ensure that they are not excluded from programs because of their handicap. Inquiries may be directed to the 504 Coordinator, Mansfield University, South Hall, Room 205, Mansfield, PA or call 717-662-4051.

mansfield
university